#### Prioritizing IT projects is always hard, Aud it ...

even tougher when you net untraded mondates to licel on scenary and comply with new legis lation, Here's how CHIs. like Bob Plane (right) at Cff Group are ignaling the wordood. Page 35



uchToDo!

## Another State Looks Offshore

Signing of low bidder faces scrutiny in Wash.

A decision by the Washington State Health Care Authority to use offshore labor for a major IT project was based in part on some pretty simple arithmetic: The contractor's bid une about \$2 million below the next lowest bid But the project hasn't

ne over budget, and an internal state document writ-

worked out as planned. It's ten in October warns of a "xig-

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mifficant risk" that it won't

"I don't think that Washing.

gine plane to introduce a bill that would block the state from sending work offshore "I think we may save money in the short term by going to our lowest bidder," Hudgins

meet the agency's requirements. The project has also prompted state legislation that would effectively bar state agencies from future use of offshore contractors.

ton state tax dollars should be used to create jobs overseas when we've got skilled workers here," said State Rep. Zack Hudgins, a Democrat. When the Washington Legislature reconvenes next month, Hud-

company will move quickly to release prodsaid. \*But in the long term, we ucts that incorundermine our communities. porate VMware our lob base, our tax base." Inc's server virtualization technology, once EMC's \$635

# IT Vendors Cast Votes With Their Checkbooks

Associations hope to avoid regulation: five key lawmakers benefit from industry funding

---

With the Democratic Party a

month from the first caucus in the presidential nominating process, the high-tech industry has cast a vote that so far favors President George W Bush, along with a select a

group of influential members of Congress. Threatened by the specter of more regulation and higher taxes, IT hardware and software manufacturers and the industry associations that lobby for

them in Washington have donated nearly as much money to the Bush campaign as to all of the Democratic candidates combined Boltstoal action committees in the IT sector

technology next year

FMC Corp. office

cials said last

week that the

BY PATRICK THIBODEAU

this year have given Bush more than \$1.2 million, con pared with \$387,886 for Democratic front-runner Howard Dean, according to the most recent filines with the Federal Election Commission Of the \$113 million donated

since 1998 to political candidates for federal office by individuals. companies and associations in the IT sector.

roughly half has gone to Democrats and half to Republicans, However, a Comnuterworld review of FEC data shows that two large vendor associations and the reveninent member companies of other influential associations have given more than \$380,000

IT Lobbying, page 16 **EMC Shapes Plans for VMware** 

Says it will integrate is completed early next year server virtualization

The officials also stressed that users won't have to buy EMC products to take advantage of VMware's technology and pledged to increase re-

search and development at the acquired company The possibilities for both vendors' product lines drow some users' interest.

Robert Stevenson, a technology strategist at The Weather Channel Inc. in Atlanta, helps oversee about

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idealed and the allegated and a least of the ACCOUNTED BY LOTTED BY

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# Hello Customers

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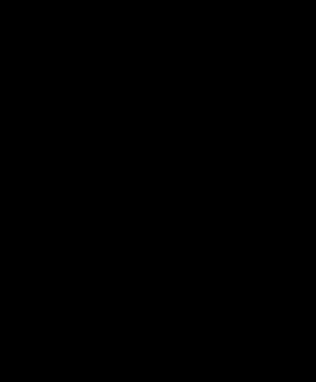
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#### FORECASTS '04

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Death of the Microprocessor

HAROWARE: Expect to see full "microsystems" stamped on a single chip and more micropayments on the Internet, says Sun CTO Greg Papadopoulos. • Quicklink 43142

Hey, it Could Happen! A Contrarian's Predictions DEVELOPMENT: Johanna Rothman may have an opaque crystal ball, but she offers lots of insights for improving software development. O Doist int 43562.

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offers tips on handling the inevitable prollicration of wireless mobile devices in your

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#### IBM. French Bank Set Up IT Venture

IBM and GNP Paribas said they're nine a joint venture that will manage the Paris-based bank's IT cture. The deal, valued at up to \$1.2 billion over five years. vers the bank's maintrames. 7 000 servers, and storage devices with a total capacity of 400TB. Both companies will contribute workers to the joint yen ture, which will start with about 450 employees.

# Microsoft Hit With

Another Lawsuit Souttle-hased RualNetworks Inc. filed a lawsuit alleging that Mi-crosoft Corp. has illegally tried to control the market for digital media technology. The suit, filed in lederal court in San Jose, claims that Microsoft has forced PC skers to include its Windows Media Player on systems and restricted how rival software can be installed. in response, Microsoft said there is "vibrant competition" in the digital randia market.

#### Citrix Buys Tools For Accessing PCs

Citrix Systems Inc. said it's baying Expericity Inc., a Santa Bar-bara, Calif.-based vendor of software that lets end users access remote PCs via the Web, Exper city's technology is primarily used by consumers and small businesses, but Fort Lauderdale, Fla.based Citrix hopes to make the software more appealing to corporate users. The purchase price is \$225 million in cash and stack

# **Red Hat Reports**

Profit, Acquisition Red Hat Inc. reported a \$4.1 million profit on \$33.1 million is rev enue for its third quarter, which ended Nov. 30. Revenue was us 35% year over year. Red Hat also said it will buy Sistina Software inc., a Minneapolis vendor of storage tools for Linux systems

# ATDEADURE Sun Tries to Boost Its IT Services Arm

Ties utility computing and managed services, moves to broaden its offerings

BY CRAIG STEDMAN

UN MICROSYSTEMS INC. executives last week outlined store the company's IT services unit is taking to make itself more competitive with the services operations at IBM and Hewlett-Packard Co. During a person bein Com as Sun's facilities here, company officials said Sun Services up. cently combined its managed services and atility computing operations under one execu-

tions to boost the adoption of data center services built around Sun's NI resource management technology Sun also plans to expand its IT services offerings into areas such as managed network security and analysis of software code for cornorate users Patricia Sueltz, executive vice

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president of the revamped Sun Services, gave the unit's current services portfolio a prade of C. "We've got a ways to go," she said

In addition, Sun Services has begun working more closely with the company's sales force to prepare bids and design system installations for customers. Sueltz said thar's part of a strategy to make the organization more of a peneral IT contractor, along the lines of what IBM and HP do.

Another Approach

However, Sun is taking a much different approach. The company began a managed services marketing push last April under the direction of Sueltz, who had taken over at Sun Services 18 months ago [QuickLink 34945], and its services workforce is smaller than those of IBM and HP. As a result. Sun is focusing on re-

and contracts that stop short of full IT outsourcine deals We're really going to show how you can use technology to run a services business." Suelty said, adding that Sun more will extend another of their IT systems and staffs. Sun's approach suite busin Shaffer director of operations

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TECHNOLOGY PLANS

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ing control of their sustance said Forrester Research Inc. analyst Frank Gillett, "Everybody offers managed services." he said. "It's just that in Sun's case, if somebody wants to do outsourcine, they have to turn to one of its partners." Judith Hurwitz president of Hurwitz & Associates, said Sueltz has made progress in converting Sun Services from a hardware maintenance oncanization to "a true consulting services business " But Sun still can't match the breadth of services capabilities that users can per from IRM and UD cho added, saving, "Right now I see them as just being in a dif-

## Services Chief Says Her Unit Is Making Progress

Since she became executive vice president of Sun Services 18 months ago, Patricia Sueltz has replaced most of the unit's management team, cut its workforce and redirected it toward higher-level consulting and man aged services afferings. Sueltz last week spoke with Computerworld is Craig Stadman about the current state of affairs at Sun Services, Excerpts

At a briging last Decombor, you detailed a lot of changes you were making, both internally and in the kind of porvices you offer. Are you where you want to be now?

I tend to be a perfectionist, so I'm not where I want to be But we have made a lot of progress. We've changed nine of our 11 executive staff members. In the fiscal year ending in June, we came in with \$3.641 billion in revenue, up about 7% year over year. I can't break out our

most but let's just say we grow profit 1996. In the quarter that ended in September, we were at 36.7% of Sun's revenue. A year ann it was about 27%

is that the kind of percents you want to see? It's good and bad news, because in the end Sun is malfy not in the services business. We're a sesterns company, and my sob is to support and amplify the software and hardware we sell, I think

in a healthy business environment Dhat nercentage I should be somewhere in the high 20s or low 30s. But in tough times. I'm glad to take up some of the slack.

As part of your managed services push, have you tried to win business from companies that don't have any Sun ent? I haven't gone that fac. I'm not an arms dealer Rut we do a lot of business with not-

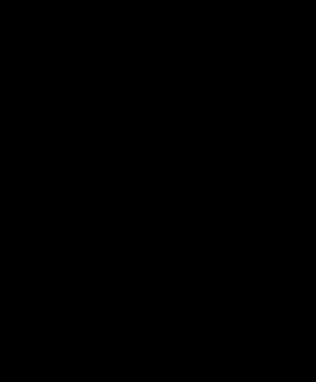
Sun-only customers because the world isn't homogeneous. The way I solve problems however, is not to be all things to all people. We do that not by throwing a lot of bodies at problems. but by utilizing technology and learning up (with nectores)

ferent league." C 43645

Your strategy stops short of extracursing and leaves use in control of their IT system and staffs. Is that a way of making iomenade out of the IBM and HP do? I don't see it that way. I think of it as being counterintuitive to just throwing bodies at a problem. We're say ing. "Let's put our experts in but leave the users in charge." I think we started with a lot more



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#### IRM French Rank Set Up IT Venture

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# Delta Says Radio Frequency ID Devices Pass First Bag-Tag Test

Technology scores high on luggage tracking, but costs slow airline's plans

ev BOB BERWIN
Delta Air Lines Inc. last week
said it got accuracy levels
ranging from 96.7% to 99.9%
during a test in which it used
radio frequency identification
(RFID) tags to track 40,000
pieces of buggage from checkin to loading on planes.

(RFID) usgs to track 40,000 protects of language from check-in to losding on planes. The success rate of the RFID technology was far checked to the result of the RFID technology was far checked to the RFID technology was far the technology and the the RFID technology was far the technology was far the technology was far the sample of the RFID technology was far the sample of the RFID technology was far the technolo

and required no new training. Delts spokesma Reid Davis warned that the airline and others in the cash-strapped industry will likely need to proceed slowly with any system-wide rollouts of RFID tags. Delta operates at 81 major airports worldwide, and Davis said equipping all of them with RFID bagsouring systems would require "a significant would require "a significant terms would require "a significant signific

cast capital expenditure."

Nonetheless, Delta plans to continue exploring the technology. Rary said it has received tenative approval from the Transportation Security Administration to run another test in Isinasury using RFID tags made by Alien Technology Corp. in Morgan HBL. Calif. The first test, done in conjunction with the TSA from a continue to the TSA from the

and SCS Corp. in San Diego.
Rary said the second one
will give Delta a chance to try
different methods of deploying tags, including the use of
better printers to write bagrouting data onto RFID chips

that are embedded in standard bar code labels. The airline's goal is to develop a bag-tracking system with a "zero mishandline rate." he added.

High Success Rates

Phil Heacock, director of advanced sortation technology in the Louisville, Ky, office of FKI Logisters Group Ltd, said that with one exception, the RFID bap-tracking system in Jacksonville provided readrates well above 99%. Scanners on the bap belts inside the terminal averaged 99.5%, and the ones on aircraft belt louders had a success rate of louders had a success rate of 99,9%, Hencock said. FKI Logistex Group served as systems integrator for the test.

tems integrator for the text.

RFID scanners mounted on
universal load devices, which
utotomatically load containers
of bags on to planes, wereaged
\$6.7% accuracy, bleacock said
\$6.7% accuracy, bleacock said
signals. Coasting their interiors
with a material that will better
reflect radio waves could help
integrove accuracy, he added.
Beacock said that Delta
printer to capture date or
mally used to print her rockes.

The information was then written on to RFID devices inserted into standard luggage tags. RFID readers tracked the progress of items through

the airport's bag-handling system, including the explosivesdetection machines that are

operated by the TSA.

The aircraft loaders were also equipped with RED readers and were hard-wired to ruggedized computers, which used 802.11b wireless LANs to transmit data to Delia's backed baggage systems.

Getting the funding needed to install RFID bag-tracking

systems can be a challenge now, said Gene Alvarez, an analyst at Meta Group Inc. But he added that he expects the technology to eventually become a standard throughout the airline industry. © 43686



#### PeopleSoft Ties Its Apps To J.D. Edwards' Software

Connectors link product lines, but users may need to buy new licenses

av MARC L. ROMENE LOOKing to deliver on the promised benefits of its acquisition of J.D. Edwards & Co., PeopleSoft Inc. last week released integration links that are designed to let users exploit functionality from both companies' lines of business applications.

applications. But users will have to buy new application licenses to take advantage of the packaged connectors if they don't already run software from both PeopleSoft and JD. Edwards. PeopleSoft said the next step in its integration plan is to transfer technology between the product lines, but it didn't disclose a schedule

for doing so.

The licensing issues are a concern for Irving Tyler, CIO

at Conshobocken, Pa-based Quaker Chemical Corp., which uses J.D. Edwards software. The integration work done by PeopleSoft is a good thing. Tyler said "However, it's confusing." be added, "Things are all moving about, and we're not sure what products are

which and how they apply to the licenses we already have." Tyler said be will have to meet with PeopleSoft to get a better grasp of what's avail-

More Technology

able from an integration standpoint, how it can be used and the software licensing ramifications.

Plessanton, Calif.-based Peoplesoft initially is offering a set of seven connectors that integrate specific modules in its PeopleSoft Enterprise and EnterpriseOne application suites, which were known as PeopleSoft 8 and J.D. Edwards 5, respectively, prior to the Table merces.

July merger.
For example, PeopleSoft has linked its strategic sourcing software to the procurement application developed by J.D. Edwards. That means EnterpriseOne users who have deployed the procurement onls at various manufacturing plants now can aggregate their parchases of materials and supplies on a global basis, said Rick Bergueitz, PeopleSoft's

chief technology officer.
The integration rollout hews to a road map that PeopleSoft officials laid our in September (QuickLink 4094). Other connectors tie together order processing and inventory management applications as well as finance and human

In addition to the links, PeopleSoft said users can consolidate data from EnterpriseOne and J.D. Edwards' older World applications into its data warehousing software and use its Enterprise Performance Man-

housing software and use its Enterprise Performance Management tools to analyze the information.

PropleSoft is taking some good first steps and appears to be picking up the pace of its

he picking up the pace of its integration efforts, said Barry Wilderman, an analyst at Meta Group Inc. In particular, he cited PeopleSoft's support for warehousing data from all of its business application suites.

But Wilderman custioned that different metadata formatting approaches may prevent I.D. Edwards users from taking full advantage of PeopleSoft's analytic applications. He also advised IT managers to work with PeopleSoft to find out how seamless the application-to-application intevention is: 0, 2005.

PEOPLESOFT MUST PAY

ebitrators tell PeopleSoft to pay a depuniled J.D. Edwards customer more than T.B. million over a fasied software-volcut. QuickLink 43664

#### Kodak Shifts CIO. Names IT Chief

Eastman Kodak Co. named Mark Gulling, formerly its CIO, to head a new global shared-services unit that will consolidate operations such as call centers and parts of the company's finance and human resources departments. Kim VanGeider, who was director of IT at Kodak's digital and film imaging systems unit, will be CIO and report to CEO Daniel Corn.

#### **FDS Names Former** Oil CIO as Evec VP

Electronic Data Systems Corp. has hired David Clementz, who retired as CIO of Chevron Texaco Corp. in July, to manage its outsourcing data centers and the facilities where it develops software for its IT services customers. As executive vice presi dest of service delivery Cloments will head one of the three operating units that EDS created in a reconstruction last .kee

#### ING U.S. Outsources Tech Ons to IBM

ING U.S. Financial Services, an Atlanta-based unit of ING Grace MV, said it has signed a sevenyear, \$600 million outsourcing viract with IBM. The deal calls for IBM to manage ING U.S.'s IT infrastructure, including its data centers, networks and help desk tions. IMG said that about 300 of its IT workers will shift to IRM as part of a transition that san last week and is due to be

Short Takes IBM announced that it has ac-Outred ROSEN PASTURE SOST WARE INC., a developer of document management software in Corvailis, Ore., for an undiscloses price.... Linux creator LINUS

TORVALDS said in an e-mail mes sage to the Linux-kernel mailing list that Version 2.6 of the open source operating system's kernel is ready for production use.

MARK HALL ON THE MARK

# IT Lets Microsoft Pocket Ill-gotten Gains ...

... by not filing for product youchers from the settlements won in states' courts. In California, for example, up to 15 million businesses. organizations and individuals qualify, but a mere 300,000 have applied so far to get the reimbursement, says Howard Yellen, CFO of Settlement Recovery Center LLC in San Francisco, Companies that negotiated contracts directly with Microsoft are excluded from the agreement.

But most companies bought through manufacturers, value, elded recellers or down at the local Office Depot, and they all qualify. The settlement (Oxick) ink 401501 covers Microsoft operating systems and applications sold from 1995 through 2001 While Vellen your become understand that an individual mucht nor ware to die through his files to find a rioript for his Windows 95 upgrade, which the courts figure Microsoft overpriced by \$29, it's just plain silly for "TI to sit on their hands" when they can collect. And big, in some cases. Yellen estimates that companies that barely uperaded at all during the seven-year period can still average \$100 per user. For those that went through a steady upgrade process

it might be as high as \$250 per user.

The average, he says, runs about \$165. The voucbers are good for most birth-tech eyar. not just more Microsoft products, Routers, Macintoshes. Sun workstations and even Linux laptops - you can go shopping. But the right

to get in line. Microsoft Assen't believe you'll bother. That's why the commony has allocated only about \$800 million to cover the California agreement, and it's doubtful that all of it will be seent. Why?

"IT managers think it's a pain in the neck," explains Yellen. Naturally his company is willing to come to your rescue, but as Humphrey Bosart's cynical Rick told Peter Lorre's character in Cosoblonco

"For a price, Ugarte, for a price," In Yelleri's case, it's 30%, but presumable without the dead German couriers. What that 30% gets you is a guarantee that your claim will be filed on time and correceiv. And Settlement Recovery Center doesn't get a nickel unless and until you do. Even if you don't use its services. Yelleo says you had better get off the

dime "It's nuts not file a claim " he concludes "Wa free monev" a While I'm on the topic of money Stor Software Inc. in Mebille, N.Y. Silver Silicon Valley start. ups think next weer might be a good time to cash in. Salesforce.com Inc. has filed SEC documents stating its intent to go public

next year. The San

Francisco-based online CRM provider may be the second-most anticipated initial public offering in 2004 behind Mourstain View, Calif.-based Google Inc.. which is rumored to be considering of fering its stock directly to burger over the Internet, Another IPO in the new year may come from security appliance maker ServGate Technologies Inc. in nearby Milnitas, Calif. # No word on whether Covalent Technologies Inc. thinks going public is in the cards for 2004, but the San Francisco company has found a way to make nice bundles of money - salling proprietary software to manage open-source technologies, Market ing Vice President lim Zemlin says 130 of the Fortune 500 so for how bought the

Covalent Application Manager, which uses lightweight agents to report on the health of everything from Linux and MySOL to IBoss and Anache, Covalent will add Postgres, a popular open-source database, in the first half of next year. and it's also taking a close look at addise support for Bricolage, an open-source content management product. Zemlin. says he's bullish about the near future because "it's only after IT builds out all the open-source that they realize it's not to be managed." D'oh! . Jeff Silva, cofounder and vice president of Mayyan Systems Inc. in San lose, says there are two hot areas in SAN management at the moment: data replication and virtual tarse libraries. And that's just what Maxxan will offer its SAN management product users beginning this week with Version 4.0 of IPStor, which it resells from from Falcon-

says data replication demand is being driven by companies under the Syrbones Oxley gur, the virtual tage libraries uffer a way to transition data from disk to 'tape" without losing the speed of data recovery that disk-to-disk gives you. And you still get to use your current tapebackup program. Q 43660

#### HP Will Add 2.5-in. Drives to ProLiant Line inted in April. transfer rates of up to 300MB/

Howlett-Packard Co. plans to

to file a claim expires on

March 15, giving you

less than three months

nut 2.5-in. disk drives with enrerorise-class features in its ProLiant servers next year and later will add the space-saving technology to its disk subsestems and arrays

Fujitsu Computer Products of America Inc. last week announced that HP has started testing its 2.5-in, drives, which use the Serial Attached SCS1 interconnect and support data

sec. In addition, Seagate Technology LLC said it will deliver 2.5-in, drives to HP and other systems vendors during the

first half of 2004 HP will be able to not three of the new driver in the came amount of space that's now occupied by one 3.5-in. model. said leff lenkins, vice presi

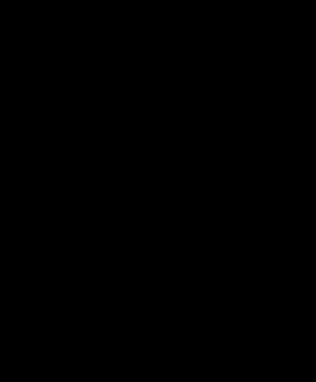
dent of server storage and infrastructure. That should let HP increase storage capacity

and data throughout in servers and disk arrays while reducing

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2005 and 2006, respectively lay Montan, storage managor at Safelite Autoelass Inc. in Columbus, Ohio, said he likes the idea that smaller drives could save space in his evergrowing data center But Morgan added, he's concerned that stacking servers with multiple 2.5-in. drives might create hot force him to reconsider the amount of weight the floor needs to support

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## BRIEFS

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Francisco-based online CRM provider

may be the second-most-anticipated ini-

tial nublic offering in 2004 behind Moun-

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#### MARK HALL - ON THE MARK

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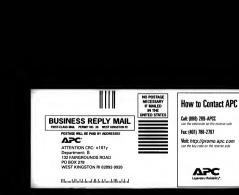
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#### Deloitte on InfraStruYura" AIR

"APC had the plan of building air conditioning systems in the rack, in a traditional data center, you always have racks which are totally filled with CPUs and which become

very hot. Then you have racks which are not denimed at all To manage the energy, the warmth and the consumption of electricity in those racks, we believe that with APC we have found the right solution."



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and office operations With InfraStruXure". you can get it right in one attempt."

# Army's IT Unit Still Untested, Despite Role in Saddam Nab

Success didn't demonstrate ROL of spending on 'digitized' unit, experts say

BY DAN VERTON THE U.S. Army's 4th Infantry Division the first so-called digital division may have played a key role in the capture of Saddam Hussein But military officials and analysts last week credited low-tech preparations and buman intelligence for the open ation's success. They said the pagaing Iraci insurpressor will be the real test of the Army's

IT investment strategy Hussein's capture came after repeated raids in and around Tikrit, Iraq, produced a wealth of information from cantured Saddum kemlists and it shouldn't be seen as justification for any of the IT systems deployed by the Army, said military analysts. "It would be foolish to justify spending on the Army's IT

simply because of the 4th Infantry Division's role in the capture of Saddam," said fames Garrett, a military ana lyst at Globalsecurity.org, a consulting firm in Alexandra Va. "While the technology undoubtedly assisted in the command-and-control efforts of the operation 115 forces probably could have captured

investment in digital divisions

Saddam even if the equipment hadn't been available." "I strongly believe that [Hussein's] capture was a combination of some very good and timely thuman intelligence) on the ground and some persistence," said Bill Crowell, a former director of

the National Security Agency. Digitization efforts are really designed to help troops vimalize where they and their fellow soldiers are positioned and to coordinate operations. Crowell said. In contrast, he said, "this operation was

senings a specific target by a

limited number of armored The Army started its multihilling-dollar digitization of fort in the late 1990s. The 4th Infantry Division was selected as the proof-of-concept unit that would test and be the first to field a slew of new coments

erized command-and-control contame for its makinbar The division didn't see major combat in Iraq because it was deployed to Turkey which didn't allow the U.S. to launch operations from its waged against U.S. troops by Hussein levelists and nutside forces will continue to measure the return on the Army's

IT importments Central to the 4th Infantry Division's capabilities is a \$20 billion program known as the Army Battle Command System, a network of applications that provides real-time intellisence and weather data to

computer terminals mounted in Army vehicles The system provides graphic depictions of the locations of friendly forces and allows them to communicate with one snother and with renion

current insurgency being the locations of known energy

> John Hillen, general manager for defense and intelligence

at Fairfax, Va.-based American O 43681

management tools, then it has

value, [but] I'm not convinced

Steve Bandrowczak, CIO at air

that this is the intent" said

freight carrier DHI, World-

wide Express Inc. in Scotts-

dale, Ariz, Bandrowczak said

Management Systems Inc. and a former special operations soldier who served in Operatinn Desert Storm, said while it's true that the 4th Infantry Division's new IT systems haven't been "battle-tested in the classic sense" the Army can now assess operations during a phase of the war that has proved to be more perilous than the initial bettle.



## **Vendors Vow to Develop Common** Interface for Server Management and OSA Technologies Inc.

Rivals team up on proposed data center standard

BY MATT HAMES EN A group of top hardware and software vendors last week joined together to begin creating a standard user interface for managing servers a move that's aimed at reducing the complexity and cost of administering data center systems.

The yendors, led by Delt inc. Hewlett-Packard Co. IBM and Intel Corp., announced the creation of a working group within Distributed Management Task Force Inc. (DMTF), a Portland, Ore.based organization that developed the Common Inform tion Model (CIM) and Web-

**Based Enterprise Management** specifications. Other companies that are taking part in the effort include Microsoft Corp., Oracle Corp., Sun Microsystems Inc., Advanced Micro Devices Inc.

The working group plans to define a CIM-based command-line interface that systems administrators could use to locally and remotely manage servers made by various vendors said Winston Burnpus, the DMTF's president. Bumpus said rival server

vendors currently offer their own management interfaces. requiring IT workers to manage each brand senarately or write code that connects different systems for mensee-

ment purposes. "Data centers have not racks of hardware, and it's hard to manage this stuff," be said. "We get the sense this is a real pain point for customers." Several IT managers agreed that server management can

be a painful process. But they said they're skeptical about the working group's plans, partly because data center management is inherently

"If this creates open stan-

that when standards are crested, individual vendors con "still drive very specific versions that cause additional

costs" for users As described by the DMTF. the proposed interface stendard "sounds like somebody saving. 'I'm against sin and in favor of motherbood.' So bow could you be against this if it comes to fruition?" said Philip Brody, chief technology officer for the Clark County

School District in Las Venas "It could make life easier for everybody, but you know promises, promises. It sounds good and desirable, but the devil is in the details."

Both Brody and Bandrow czak said their IT staffs have to manage many brands of servers. "It's very complex to support multiple vendors with multiple storage-area network solutions and operating systems." Bandrowczak said.

The new working group set a July I deadline for proposing its first specifications to the DMTF. Bumpus said the common interface could eventually be moved beyond servers to support networking devices such as switches and routers

as well as PCs. O 43661

# **A Sound Storage Investment**

Yankee Group report finds users of VERITAS storage management software realize 3-year ROI of at least 200%.

As storage-related expenses chew up ever-larger amounts of IT budgets, IT executives looking for ways to contain storage costs are increasingly turning to a heterogeneous management approach to help them rein in costs while improving performance.

#### Key Heterogeneous Storage Management Benefits



#### UFRITAS delivers ROL

Customer	3-year ROI	Payback period
Government agency	204%	15 months
Service provider	201%	11 months
Financial services company	205%*	13 months
Desirated		

# Download the full report

The Yankee Group report, "Storage of Management Return on Inswestment from Deploying YERITAS Software" is available free oritins. The report contains detailed financial analyses of the three cese studies mentioned here, to help you make your own business case for heterogeneous backup software.

Go to: www.veritas.com/offer and enter reference code 4391. That is but one of the key findings of a recent study by the Yarkee Group on storage management remon investment. The Yarkee Group, a snearch firm based in Boston, surveyed 29 If rescutives a Global 2000 firms for the study, and also homed in on three users of VERTIAS Software storage management tools to determine total tool of oursectable and ROI figures for their VERTIAS Software Sorge in American Software Softw

The results present a resident cleanable case for the benefits of a heteroperous sterogen emangement approach. A government approach a Royal of 204 percent, a service provider material and Rolf of 204 percent and a financial services company aspects a return of 205 pincent over three years from their respective VERTIA'S storage management software deployments. The three companies service play storage financial services conducted from a detail analysis of Yallow South Constitution of the South Constitution of the South Constitution of the Wheel Constitution o

"All three sites also asportenced a marked decrease in the lethor costs associated with managing their storings operations, reducing the time necessary to handle round through managiners tasts and vastly improving the storing entitles of the storing managiners to be a storing to the control of the storing with the storing the province of the storing with the storing the storing environments."

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Storage budgets make up 10 percent to 20 percent or overall T infrastructure budgets, prompting more companies to establish separate storage groups within their IT organizations, the study says. Some 46 percent of the companies Variate Group surveyed hive separate storage groups. With that land of increase emphasis on storage comes more scrutiny of storage costs and interest in measuring the value of storage.

Increasingly, enterprises ore finding that the ability to manage a mall-hearder strapes environment from a common platform brings numerous benefits, including improving producityly for IT administrators. The strategy also reduces vendor lock-in, enabling customers to sessict management software independently of their hardware platform, and to select the hardware that best fits each specific beauty requirement. Additionally, the strategy reduces downline, cuts deployment time and streamlines management.

processes, the report found.

The bottom line: it's easier and more cost-effective when one can manage storage is a heterogeneous manner, the proof states, noting the strategic employed by more than 50 percent of enterprises today. Pursuing heterogeneous strange management is a strategic imperative this year and beyond.\*

Both the larger, 289-use ravey and the in-depth

intensity with the three VERITAS customers showed as core requirement in the storage management by open a core requirement in the storage management by open decision is improving administrator productively. Whether it is storage provisioning, immanging storage capacity and the storage network, or attending to back-ups, storage decision-makers describe how address the storage management tools has reduced municipal control of the control o

report says.

Yankee Group's analysts of the three VERITAS customers, who provided detailed financial information on the condition that they not be named, illustrates the savings to be had.

The government agency customer operates a main

data center with storage growth rales of 100 percent per war. It has 52 UNIX servers running a mix of IBM AIX and Sun Solans, Unino VFRITAS NetBackun to back up the servers, and VERITAS Foundation Suite for volume management, the agency estimates it reduced time spent on storage management tasks by 25 percent, Additionally, NatBackup enabled the agency to use a ferred backup configuration and consolidate storage to four tage libraries, eliminating the need for an estimated 11 tape libraries, the recort says. VERITAS' service provider customer, which offers application hosting services for enterprises, had even more stringent storage requirements. The company operates two data centers with a mix of 900 Windows. Linux and UNIX servers with 63TR of direct-attached storage and five SANS with 75 TB of capacity. Using a combination of VERITAS Cluster Sever, VERITAS Database Edition and NetBackup, the company was able to increase uptime to 99 999 percent - the "five nines" level that telephony companies strive to meet.

The brid case study focused on a financial services company with a highly transactione envorament that includes 20 Sun Solenis serviers, a SAN supporting about 10 TB of date and a mo of herited-Peckade, EMC and Histori Data Systems storage systems. Lesing the VERTAS Foundation Soles VERTAS SAMPoint Control and VERTAS SAMPoint Control and VERTAS SAMPoint Foundation Soles HA, both abover, the company increased as Soles HA, both abover, the company increased as soles HA is the control of the company increased as the company increased as the company increased as the company increased as processed, the recommendation productivity by about 50 process, the record size.

its 11-month payback period was the shortest of the

three customers Yankee Group interviewed

percent. the report says.
In its conclusion, the Yankee Group report says customers looking at storage management solutions should consider a number of issues, including the ability to demonstrate productivity improvements are

as a heterogeneous and centralized approach.

As the results of this ROI case study indicate, VER-

ITAS software can provide significant financial benefits to customers dejolyding storage management software, "the report says." All the highest level, VERTAS has demonstrated it can save outsomers significant costs associated with hardware purchase avoidance, reduced labor costs due to higher productivity, as well as reduced deventions costs:

# Army's IT Unit Still Untested, Despite Role in Saddam Nab

Success didn't demonstrate ROI of spending on 'digitized' unit, experts say

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after repeated raids in and around Tikrit, Iraq, producted a wealth of information from captured Saddam lovalists. and it shouldn't be seen as justification for any of the IT sesiems denloyed by the Army, said military analysts. "It would be foulish to-inetify spending on the Army's IT

investment in digital divisions simply because of the 4th Infantry Division's role in the capture of Saddam," said James Garrett, a military analyst at Globalsecurity.org. a contuiting firm in Alexandra Va. "While the technology undoubtedly assisted in the command-and-control efforts of the operation, U.S. forces probably could have captured Saddam even if the equipment hadn't been available?

"I strongly believe that [Hussein's] capture was a combination of some very good and timely (human intelligence] on the ground and some persistence," said Bill Crowell, a former director of

the National Security Agency. Digitization efforts are really designed to help troops visualize where they and their fellow soldiers are positioned and to coordinate operations. Crowell said. In contrast, he said, "this operation was

against a specific torset by a limited number of appeared

The Army started its multibillion-dollar divitization effort in the late 1990s. The 4th Infantry Division was selected as the proof-of-concept unit that would test and be the first to field a slew of new computerized command-and-control

systems for its vehicles. The division didn't see major combat in Iraq because it was deployed to Turkey which didn't allow the U.S. to launch operations from its

Army Battle Command Sys. tem, a network of applications that provides real-time intellisence and weather data to computer terminals mounted

in Army vehicles The system provides graphthem to communicate with

ic depictions of the locations of friendly forces and allows one another and with senior

waged against U.S. troops by

Hussein localists and outside

sure the return on the Army's

Course to the 4th Infantry

Division's canabilities is a \$20

billion program known as the

forces will continue to mea-

IT investments

the locations of known enemy

John Hillen, seneral manager for defense and intelligence at Enirfey Vs.-based American

Management Systems Inc. and a former special operations suldier who served in Onesa. tion Desert Storm and white it's true that the 4th Infantry Division's new IT systems haven't been 'battle-tested in the classic sense" the Army can now assess operations during a phase of the war that has proved to be more perilous than the initial battle.



# **Vendors Vow to Develop Common** Interface for Server Management

Rivals team up on proposed data center standard

BY MATT HAMBLEN A group of top handware and

software vendors last week joined together to begin creating a standard user interface for managing servers, a move that's aimed at reducine the complexity and cost of administering data center systems The vendors led by Dell

Inc. Howlest-Backard Co. IBM and Intel Corp., announced the creation of a working group within Distributed Management Took Force Inc. (DMTF), a Portland, Ore.based organization that developed the Common Information Model (CIM) and Web-Based Enterprise Management

specifications. Other companies that are taking part in the effort include Microsoft Corp., Oracle Corp., Sun Microsystems Inc., Advanced Micro Devices Inc.

The working group plans to define a CIM-based command-line interface that systems administrators could use to locally and remotely man-

age servers made by various vendors, said Winston Burnpus. the DMTF's president. Bumpus said rival server vendors currently offer their

own management interfaces. requiring IT workers to manage each brand separately or write code that connects different systems for management nurnoscer "Data centers have got racks

of hardware, and it's hard to manage this stuff," he said. "We get the sense this is a real pain point for customers." Several IT managers across that server management can

be a painful process. But they said they're skeptical about the working group's plans. partly because data center management is inherently complay

"If this creates open stan-

that when standards are created. individual vendoes can "still drive very specific very sions that cause additional

costs" for users As described by the DMTE. the proposed interface standard "sounds like somebody saving. I'm against sin and in favor of motherhood. So how

could you be against this if it comes to fruition?" said Philip Brody, chief technology officer for the Clark County School District in Las Verus "It could make life easier for everybody, but you know promises, promises. It sounds

good and desirable, but the devil is in the details." Both Brody and Bandrow czak said their IT staffs have to manage many brands of servers. "It's very complex to support multiple vendors with multiple storage area network solutions and operating sys-

tems." Bandrowczak said. The new working group set a July I deadline for proposing its first specifications to the DMTF. Bumpus said the common interface could eventual ly be moved beyond servers to support networking devices such as switches and routers as well as PCs. O 43661

value. [but] I'm not convinced

Steve Bandrowczak, CIO at air

that this is the intent," said

freight carrier DHL World-

wide Express Inc. in Scotts

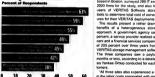
dale, Ariz, Bandrowczak said

# A Sound Storage Investment

Yankee Group report finds users of VERITAS storage management software realize 3-year ROI of at least 200%.

As storage-related expenses chew up ever-larger amounts of IT budgets. IT executives looking for ways to contain storage costs are increasingly turning to a heterogeneous management approach to help them rein in costs while improving performance

#### Key Heterogeneous Storage Management Benefits



#### **UFBITAS delivers BOI**

Customer	ROI ROI	Payback period	
Government agency	204%	15 months	
Service provider	201%	11 months	
Financial services company	205%*	13 months*	
* Devected	source the manuscriptor		

That is but one of the key findings of a recent study by The Yankse Group on storage management return on investment. The Yankee Group, a research firm based in Boston, surveyed 289 IT executives at Global 2000 firms for the study, and also homed in on three users of VERITAS Software storage management tools to determine total cost of ownership and ROI fig-

The results present a rather dramatic case for the benefits of a hoterogeneous storage management approach. A government agency saw an ROI of 204 percent, a service provider realized an ROI of 201 percent and a financial services company expects a return of 205 percent over three years from their respective VERITAS storage management software deninyments The three companies saw a payback period of 15 months or less, according to a detailed financial analysis Yankan Group conducted for each of the three cus-

"All three sites also expenenced a marked decrease in the labor costs essociated with managing their storage operations, reducing the time necessary to handle routine storage management tasks and vasity improving their ability to manage complex storage anvironments," according to the study, written by Yankee Group senior analyst Jamie Gruener and sponsored by MEDITAR

Storage budgets make up 10 percent to 20 percent of overall IT infrastructure budgets, prompting more companies to establish separate storage groups within their IT organizations, the study says. Some 48 percent of the companies Yankee Group surveyed have separate storage groups. With that kind of increased emphasis on storage comes more scrutiny of storage costs and interest in measuring the value of storage

Increasingly, enterprises are finding that the ability to manage a multi-vendor storage environment from a common platform brings numerous benefits, including improving productivity for IT administrators. The strateay also reduces vendor lock-in, enabling customers to select management software independently of their hardware platform, and to select the hardware that best fits each specific backup requirement Additionally, the strategy reduces downtime, cuts deployment time and streamines management processes the report found

The bottom line: it's easier and more cost-effective when one can manage storage in a heterogeneous manner," the report states, noting the strategy is employed by more than 50 percent of enterposes. today. "Pursuing heterogeneous storage management is a strategic imperative this year and beyond. Both the larger, 289-user aurvey and the in-depth

interviews with the three VERITAS customers showed a core requirement in the storage management huseon decision is improved administrator productively Whether it is storage provisioning, menaging storage capacity and the storage network or attending to backups. storage decision-makers describe how adopting new storage management tools has reduced mundane/routine tasks for administrators significantly," the

Yankee Group's analysis of the three VERITAS rustomers, who provided detailed financial information on the condition that they not be named dissirates the

The government agency customer operates a main data center with storage growth rates of 100 percent per year it has 52 UNIX servers running a mix of IBM AIX and Sun Solans Using VERITAS NetBackup to back up the servers, and VERITAS Equipolation State for volume management, the agency estimates it reduced time spent on storage management tasks by 25 percent Additionally NetBackup enabled the agency to use a fiered backup configuration and consolidate storage to four tane libraries elimination the need for an estimated 11 tage libraries, the report says

VERITAS' service provider customer which offers application hosting services for enterprises, had even more stringent storage requirements. The company operates two date centers with a mix of 900 Windows Linux and UNIX servers with 63TB of direct-attached storage and five SANS with 75 TB of capacity Using a combination of VERITAS Cluster Sever, VERITAS Database Edition and NetBackup, the company was able to increase uptime to 99.999 percent - the "five nines" level that telephony companies strive to meet. its 11-month payback period was the shortest of the three customers Yankee Group interviewed

The third case study focused on a financial services company with a highly transactional environment that includes 20 Sun Solens servers, a SAN supporting about 10 TB of date and a mix of Hewlett-Packard EMC and Hitach Data Systems storage systems Using the VERITAS Foundation Suite, VERITAS SANPoint Control and VERITAS SANPoint Enundation Suite HA, for failover, the company increased its capacity utilization from 25 percent to 85 percent it also increased administrator productivity by about 50

percent, the report says. in its conclusion, the Yankee Group report says customers looking at storage management solutions should consider a number of issues, including the absity to demonstrate productivity improvements as well as a heterogeneous and centralized acordach

'As the results of this ROI case study indicate, VER-ITAS software can provide significant financial benefits to customers deploying storage management software," the report says. "At the highest level, VERITAS has demonstrated it can save customers sugnificant costs associated with hardware purchase avoidance, reduced labor costs due to higher productivity, as well as reduced downtime costs."

## Download the full report

The Yankoo Group report, "Storage Management Return on Investment from Deploying VERITAS Software" is available free online. The report contains detailed financial analyses of the three case studies mentioned here, to help you make your own business case for heterogeneous backup software.

## Go to: www.veritas.com/offer and enter reference code 4391.

#### Cisco Warns Heers Of Firewall Flaws Cinco Sestems for issued warnings about security holes that could be used to launch denial-of-

service attacks against its PIX firewall devices and the firewall ore in its Catabet 6500 and 7600 series switches, Cisco said users can get free upgrades to new coftware releases that are designed to fix the problems.

#### Oracle Sees Rise in Revenue, Income

Oracle Corp. reported an 8% year-over-year increase in reus and a 15% kerns in profit for its second quarter, which ended Nov. 30. Oracle said sales in rth America bounced back fol ring a sales force overhaul.



#### Microsoft Sets Plan To End Win 2k Sales rosoft Corn. said it will obase out sales of Windows Server 2000 over a two-year period rting April 1. After that date the software won't be available through Microsoft's volume-ling programs. Systems ven

ers will stop selling Windows YOO next November, althoug rs will be able to get copie until April 2006 by licensing Win ers Server 2003 and downop. (For more details, on one: QuickLink 438471

# Short Takes

Ed Zander, who resigned as SUN MICROSYSTEMS INC.'s pres in July 2002 and has been work ing at an investment firm, was ned chairman and CEO of MOTOROLA INC. . . . Stockholi hannel sirling and travel com-

SAS AR and COMPLITER SCIENCES CORP. signed an IT outs deal that could be weeth \$1.5 hilllon over nine years.

#### **EMC/VMware**

250TB of storage across multivendor storage systems from IBM. Hitachi Data Systems Corn and FMC Stevenson said EMC's goal of virtualizing the server stack in order to no multiple instances of storage management software without requiring an addition-

al server piques his interest. Stevenson, like many storage administrators, believes that storage management is clunky and that reallocating or resizing storage resources for business applications takes too much time and disruees operations

ey can beln us enable more storage consolidation without bost downtime or impact I'm interested " he said But Sec. venson also criticized most virtualization technologies as being too narrow in scope and at locking busers into a partie. ular vendor's product, which is not enabling virtualization on 2 heterogeneous level." VMware user Tony Adams.

a technology analyst at LR Simplot Co., a \$3 billion agribusiness corporation in Boise Idaho, said, "VMware excels in both their technology and their customer relations. It's my understanding that EMC is also very customer-focused. so if they can maintain or even

strengthen VMware's techni-

FMC Acquisition Timeline

cal position, then existing enterprise customers should be in egod shope" V Mware faces competitive pressure, particularly from

Microsoft Corp., which gained virtualization technology in its Connectix Corp. acquisition earlier this year [Quick] ink 42840]. By becoming part of EMC, Palo Alto, Calif-based VMware gains the backing of a "very large, well-capitalized" company with a lot of influence in the data center, said Gordon Haff an analyst at the luminata Inc. in Nashua, N.H. FMC meanwhile is a direct competitor in the storage arena with IBM, a company with

which VMware has a close partnership. Haff said he doesn't expect any radical changes in that partnership but IBM could become enutious in the future. EMC officials, citing the differences in product lines. said they expect no conflict. In a statement, IBM said it will still work "closely with

VMware and will continue to complement our virtualization offerings for Intel systems with partner technologies EMC maintains that its own and VMware's product lines will benefit from the acquisition. For instance, EMC's Symmetrix Remote Data Facility allows one storage array to mirror in real time an array in another data center If there's a need for the application to switch from the primary to the secondary site, there may be some application downtime.

But by integrating VMuraco's storage and server virtualization canabilities. FMC said is will have a technology that allows an application to switch to a different array without downtime. That is one of the first things we will be working on," said Chris Gahagan. EMC's senior vice president of storage infrastructure. That technology is expected to be ready a few months after the sale is completed, he said.

William Hurley, an analyst of Enterprise Application Group in Portland, Orc., said VMware gives EMC an operating platform on which to run the many management applications it has obtained over the nast wear through acquisitions Hurley added that while those management applications provide EMC with a

greater opportunity to control more of the data center stack in an automated (ashion, the company will fall short of its vision to offer users a policydriven technology that controls data storage from credle to prave if it doesn't integrate those products into a single management suite

"[EMC has] to be able to ad dress the fact that they do have IBM and other diversi-

fied vendors . . . helping customers achieve a lower overall business TCO, as perposed to selling them pieces of an overall larger technology puzzle," Hurley said. O 43964

#### BizTalk Server Ship Date Slides to Next Year

BY CAROL SLIWA Kelly said notine that shour Microsoft Corn last week an-250 users are testing the softnounced that packaging and ware. "We really just want to pricing won't change for the make sure it meets all their exupcoming release of its BizTalk pectations," Kelly added. Server software, but the company has yet to pinpoint the

sion is called BizTalk Server 2004, it had been scheduled to ship by the end of this year. Eron Kelly, a lead BizTalk Server product manager, said the product is now expected to be released early next year. We won't ship without customers telling us it's ready"

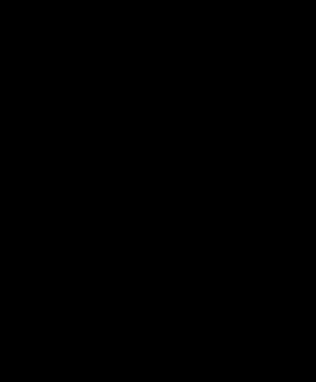
The third major release of BizTalk Server - software deproduct's release date. signed to help users integrate Even though the new verapplications and automate business processes - will add business-activity monitoring and a scalable rules engine. It will also ship with Microsoft's Visual Studio . Net tools.

enabling developers to work in the same environment that they're accustomed to when building general Windowsbased applications. The 2004 version will also include copies of Microsoft Office InfoPath 2003 a new product that lets users create XML-based forms and submit them to XMI -mabled systems. Kelly said customers will get one license of Info-Path for each per-processor Biz Talk license they buy. To use InfoPath, the product

would also need to be running on the client, he added Pricing will remain the same as it was for Biz Talk Server 2002, according to Kelby The Enterprise Edition sells | 2002 version O 43658

for \$25,000 per processor, the Standard Edition is \$7,000 per processor the Partner Edition is \$1,000 per processor, and the

Developer Edition costs \$750. Standard and Partner Edia tion customers will get some extra benefits. The Standard Edition currently allows connections to 10 trading partners and five internal applications: that will change to 20 trading partners and 10 internal applications with Biz Talk Server 2004 The new Partner Edition will allow connections to three trading partners and three internal applications, up from two of each with the



# BRIEFS

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# BizTalk Server Ship Date Slides to Next Year

Microsoft Corp. last week announced that packaging and pricing won't change for the upcoming release of its Biz Talk Server software, but the compuny has yet to pinpoint the product's release date.

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To the Delig Spillities in Samsung.



fter a three-year roller-coaster ride, the IT industry settled down a bit in 2003. The year seemed to provide a respite from historyking corporate scandals, monopoly-busting, and the exhilarating but scary boom-and-bust cycle. Not that anyone was operating on cruise control. as this roundup makes clear. Here are the too 10 IT stories of the year, not necessarily in order of

Offshore Outsourcing: One Worker's Gain Is Unother's Loss

Stories about U.S. cor outsourcing work to India have been reported for years. But this year it became apparent that Romania, Bulgaria, Russia, Chins, Ghans, the Philippines and dozens of other countries are also clamoring for, and getting, business from the U.S. The value of IT services provided to U.S. bustnesses from offshore labor will double to \$16 billion next year and then almost triple to \$46 billion by 2007, accordi to market research firm IDC Forecasts such as this sparked fears that Western IT workers would face increasing competition and prompted politicians and trade unions to raise the specter of protectionism.

racie, PeopleSoft and D. Edwards Star in

. Edwards Star In ruer Drama of the Year Legal bettles also added to the drama of PeopleSoft Inc.'s acquisition of rival ERP software maker J.D. Edwards & Co. and its subsequent fight to ward off a bostile \$5.1 billion takeover bid from Oracle Corp. Oracle, acting as spoiles of the J.D. Edwards deal, got hit with several lawsuits by its takeover target. The fracas is a milestone: The fragmented ERP market has been due for a shakeout, and the Oracle/ PeopleSoft bout may end up being just one of many battles. as a series of mereers leads to a new chapter in a business applications story in which there see far fewer characters. O +3320

On-Demand Computing Message Besieges Usors

m You can call it 'utility computing," or you can call it adaptive computing," or you can call it "autonomic computing," or you can call it mind-numbing vendorspeak. But whatever you call it, the on-demand computing messace bombarded users relentlessly IRM Rendert Packard Co., Sun Microsystems Inc., Computer Associates International Inc. and Microsoft Corp. led the assault, attempt ing to gain mind share from IT professionals who are easer to boost efficiency and lower costs in their data centers. But users and analysts agree that a computing infrastructure that adapts to business needs is a long-term vision that will materialize only incrementally over the next decade or so.

## 0 40444 Spam Grows From Annoyance to Major Political Issue

This year, spam was a car célèbre for politicisms in Furope and the U.S. In October.

effect for the 15 European Union member states. In the last few weeks of the year, the U.S. Congress followed suit by sending an ont-cut entireum bill to President George W. Bush to sign. Squabbles over differences in approach gave way to agreement that unless some sort of an antispam erackdown also occurs in Asia, purveyors of unsolicited e-mail will find a haven there.

# O +3300

Slammer and Other Horms Continue to # The year had just begun when Slammer hit the Internet, proving to be the fastest-

spreading worm to date and reminding Internet users globally that security is still an unresolved problem. The good news is that most affected organizations said prompt resctions and new security techpology prevented more widespread disruptions. The bad news is that security flows in popular software will likely allow malicious backers to continue to plame users. Q a1280

SCO Rocks the Linux Boat I just when things appeared to be going great for Linux the world over, a wreach id the works alarmed the open-

source faithful. When The SCO Group Inc. filed a lawruit in March charging IBM with misappropriation of trade secrets. Linux users saw that the move involved more than a contract dispute. SCO asserts that IBM took propri-

etary Unix code it into the opensource commumity. This mostdies the legal waters for open-source software users. some of whom

restrict Linux users' ability to redistribute source code. O 43260 .....

Wi-Fi. low-cost 64-bit computing took a step toward prime time in 2003. Advanced Micro Devices Inc. played a key role in lighting a fire under the market for 64-bit computing launching the Opteron chip in April and the Athlon64 processor in September. Since the chips run both 32- and 64-his applications, AMD hopes to belp customers bedee their investments in old technology and ease the transition to new

applications. Though deskton users will have to wait for many applications, as well as for a 64-bit version of Windows that isn't expected until the second half of 2004, the stage is set for the average user to get the benefits of faster video encoding and better performance from complex applications such as computer-aided design, © 43032

Wi-Fi Goes Wild

While Wi-Fi "hot snots" had already started to spring up in public places last year, it wasn't until this year that you could count on finding them in coffee shops throughout most of the globe's major cities. Intel Corp.'s Centrino chip package, tailored for mobile computing applications, helped fuel interest in wireless computing. Meanwhile, new specifications such as 802.11g, combined with new smart-antenna technology.

will boost Wi-Fi range and signal strength and undoubtedly further fuel the wireless revolution O k1000 

#### PC Market Shows Signs of Life After lying moribund for a

year or so, PC shipments were forecast to grow more than 11% for 2003. That rate would mark double-digit growth for the first time since 2000. An expected surge in busi spending in the U.S. beloed push the forecasts up above 10%. Analysts are also starting to predict double-digit growth for 2004 @ +3670

#### Optimism Re-emerges By the end of the year, rosy predictions for handware

ioined upbeat economic news, including moves by the Nasdag stock exchange to bring more technology stocks into its Nasdag 100, at the index rose by more than 40% from 2002 levels. This gave a lift to the end of 2003 which in a sense was the year of the tech story that wasn't Prognosticators' forecasts for an unturn in 2002 had been dashed which had a dampening effect on the usual hype surrounding new

Now industry watchers are starting to talk up technology that emerged this year but might need a more robust buying climate to really take off. Look out for a resurgence in spending - IDC forecasts overall IT spending to grow 6% to 8% in 2004 - and for trends such as the increasing use of on-demand computing resources, low-cost commodi ty computing systems that incorporate Intel chins, adontion of Linux and a focus ou regulatory compliance issues.

Ferranti is executive news editor of the IDG News Service Don Tennant contributed to this story.

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# Recipients of High-Tech Lobby

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RANK	CANDIDATE	OFFICE			
1	State, George W. (R)	Provident	51.2M		
2	Door, Housed (II)	President	\$387 886		
3	Storry, John (8)	President	\$350,750		
4	Linkerman, Jee (D)	Product	5229.720		
5	Belly, Briss C. (R-th.)	Senate	S112 110		
6	September (Statement A. (D)	President	\$106,200		
7	Edwards, John (D)	President	584.150		
	Clark, Wholey (21)	Prosident	\$73,800		
9	State, Tear (S-UL.)	Human	\$71,500		
10	Marin, Jim (D-Mr.)	House	\$52,234		

Continued from page I

# IT Lobbying

to five key law makers who have taken leadership roles on ieture such as IT security ronulation and federal IT acquisition policy (see chart below) Those lawmakers are Sen. Susan Collins (R-Maine). chairman of the Senate Gove

ernmental Affairs Commissor Rep. Christopher Cox (R-Calif.), chairman of the House Homeland Security Committee: Rep. Tom Davis (R-Va.) chairman of the House Government Keform Committee; Rep. Zoe Loferen (D-Calif.) who represents tech-dominat-

IT ORGANIZATION

Key ITAA Members

BSA Policy Members

Key EIA Members

Key ITI Members

U.S. Chamber of Commerce

Key TechNet Members

ed Sillicon Valley; and Ren Adam Putnam (R-Fla.), chairman of the House subcommit-

tee on technology policy. Putnam has threatened to introduce security legislation next spring if the private sector doesn't improve IT security on its own

The IT vendor associations that have formed PACs include TechNet and the Information Technology Association of America (ITAA) Those that haven't formed

PACs but whose member companies have made sizable, independent donations to key lawmakers include the Buriness Software Alliance (BSA). the Electronic Industries Alliance (EIA), the Information Technology Industry Council (ITIC) and the U.S. Chamber of Commerce.

Some industry executives view the contributions as a way to min occur to Con press. The groups in question and the lawmakers they support, however, claim that the money doesn't set the wonds but supports candidates who share their philosophy about the roles of government and industry

Dave Morin a snokesman for Davis, said the IT sector supports Davis because of his belief that government should play an enabling role and not an inhibiting one when it comes to regulating the indusrry "Companies and associations support members with the best policy," he said. "Chickens don't give money to

Col Sander Bob Dix. Putnam's staff director and a lonetime arrockate of Davis', said that "the reason people support [Davis] is not because he's in any body's hip pocket but because

they support his economic agenda." Putnam has also asserted his independence, said Dix During a Dec. 17 meeting of the Corporate Information Se-

curity Working Group [Quick-Link 42668]. Putnam made it clear that his committee wouldn't alien itself with the agendas set by the industry working groups formed at

\$8.506

\$50,973 | \$207,404 | \$62,904

IT Vendor Contributors in 2004 Election Cycle

RANK	ORGANIZATION	AMOUNT	DEMS	
1	Microsoft	\$702,880	100%	50
2	Cinco	\$161,374	48%	52
3	EDS	\$139,995	30%	68
4	Intel	\$132,505	44%	58
5	Collaze Enterprises	\$124,500	Pile	99
6	EMC	\$123,000	916	95
7	Achievement Technologies	\$101,000	SHIL	16
8	ISM	295,545	100%	33
9	Siebel Systems	\$89,500	£5%	55
10	Hewlett-Packard	\$80,940	1076	
11	Gatoway	\$71,000	35%	
12	eBay	\$80,250	41%	
13	Dell	\$59,700	30%	
14	Oracle	\$56,016	62%	
15	Perot Systems	\$55,325	10%	
16	TechNet	854,376	40%	
17	eScription.com	\$52,000	100%	
18	Intergraph	\$51,809	20%	
19	Texas instruments	<b>\$51,400</b>	98%	
20	Computer Associates International	\$46,380	88%	

the National Cyber Security

Summit on Dec. 3 [QuickLink 432941 Harris Miller, president of the Arlington, Va.-based ITAA. made no apologies for his oreanization's role in the political process. \*ITAA makes PAC

contributions to support members in both parties who see the future of the Internet based on competition, not resulation, and who advocate nositions on issues we consider important to the health and vitality of the IT industry," he

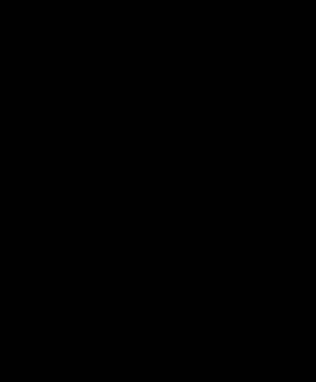
TechNet, whose PAC has donated nearly \$305,000 to lawmakers since 1998, didn't respond to requests for comment; the BSA and the FIA

also didn't respond. Shannon Feaster, a spokeswoman for the Washingtonbased ITIC, a tobbying group whose 29 member companies are some of the largest vendoes in the IT industry, said that the ITIC doesn't give

money to PACs ITIC member companies. bowever, have independently donated more than \$85,000 to

key lawmakers Andrea Hofelich, a spokeswoman for Collins, claimed ... that because the sension has focused mostly on the government's own IT acquisition programs, campaign contribu tions haven't been an issue. Collins "always approaches the issues with an open mind

toward what's best for the taxpayer," she said. O 43668 WATCHING WASHINGTON



# s of High-Tech La

IT Lobbying

to five key lawmakers who have taken leadership roles on insper such as IT occurity roo-

ulation and federal IT acquisition policy (see chart below) Those lawmakers are Sen. Susan Collins (R-Maine). chairman of the Senate Gov. ernmental Affairs Commi Rep. Christopher Cox (R-Calif.), chairman of the House Homeland Security Committee: Rep. Tom Davis (R-Va.). chairman of the House Government Reform Committee:

Rep. Zoe Loferen (D-Calif.).

who represents tech-dominat-

ed Silicon Valley; and Rep Adam Putnam (R-Fla.), chair man of the House subcommit-

tee on technology policy. Putnam has threatened to introduce security legislation next spring if the private sector doesn't improve IT securi-

ty on its own. The IT vendor associations that have formed PACs include TechNet and the Information Technology Association of America (ITAA).

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IT Vendor Contributors in

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49

2004 Election Cycle RANK ORGANIZATION Mirroret Ciece FDS 324 -College Enterprises .

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50%

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payer," she said. O 43888 WATCHING WASHINGTON

IT ORBANIZATION								
Toolstot	\$0	\$2,223	\$3,500	87,354	30			
Key Techtlet Members	\$13,000	322,000	\$44,750	\$34,600	50			
ITAA	\$0	8250	\$4,286	\$1,000	\$0			
Key ITAA Members	38,500	\$27,000	\$67,250	\$2,000	8500			
BSA Pelicy Members	\$0	\$500	\$7,000	\$4,250	\$1,000			
Key Et Monters	\$2,000	\$0	537,250	\$3.000	80			
Key ITI Members	\$16,500	\$0,000	\$43,368	\$10,500	\$6,000			
U.S. Chamber of Commerce	81,000	80	\$0	80	\$1,000			
TOTAL	341,000	900,978	8267,404	302,904	20,500			

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#### MARYFRAN IOHNSON

# Scrambled Priorities

THE DIRE NECESSITY of setting priorities has been on my mind ever since I stepped off an airplane last week and realized that I had done no Christmas shopping. This was a looming crisis of spectacular proportions

involving expectant friends and merciless family members in several

states. They would be neither mollified nor im pressed by my lame explanations of how the holiday season had somehow caught me unawares. Only a few weeks earlier, my priorities seemed

perfectly aligned. When there's so much to do that it's simply too much to accomplish everything most of us just do the pert thing on the list. Whatever that is,

IT organizations are guilty of this behavior on a much grander scale, especially during this prolonged stretch of "doing more with less." This leads to impossibly long project lists and stretches resources wafer-thin in all directions. It also lengthens the eternal struggle to align technology spending appropriately with business needs.

And this means real trouble in 2004. Why? Because the IT resources balancing act now includes perilous new elements that can't be ignored. as this week's Cover Story on prioritizing business projects, security and legislative mandates points out ["Too Much to Do!" QuickLink 432361. The biggest challenges for IT organizations in the coming year won't involve debates over Web services or wireless rollouts. They won't revolve around internal business units or even external customers. They'll involve lawyers, auditors and worried boards of directors - a trio of external factors that will reshape the IT management landscape in unforeseen ways

"It's frustrating. I have other aspirations, like growing the company, satisfying the customer, increasing operational efficiencies," says Marty Chuck, CIO at Agilent Technologies, one of the companies profiled in our story "I don't want to be spending on [regulatory issues]. It's a necessary evil, chewing up resources we'd rather spend on something else."

Chuck makes the important point that IT alone can't be responsible for solving these problems. Senior business management needs to help set priorities about how regula-

tory and security issues should be handled, "You've got to get senior business leaders into the process, or it can eat up a lot of time and monev." he warms, referring to that IT propensity to take on yet another problem and overengineer the so-

Our story delves into the details of how several companies - Agileot. Harrah's Entertainment, CIT Group

and Pacific Gas & Electric - are balancing their regulatory risks with their business priorities for the coming year, CIT Group, for example, brought in a consulting group to help create a mapping process that ranks the security risks of different applications. The CIO also pulled the CFO and various business units into the act of determining expense levels

and project pacing I heard that same desire for deeper IT/business collaboration in setting priorities echoed recently at UCLA. during an IT executive education program at the Anderson School of Business. Two dozen senior IT managers were debating bow to best show leadership on the business side. given the way so many companies still view IT as a service organization rather than a strategic player, "We're

here to learn the business models, to get bewond just great competence in IT," said one executive Getting beyond technology competence and connecting with business priorities is the single most important task facing IT leaders in the coming year. And the best IT organi-

zations will use this looming crisis of regulatory compliance and security threats to make that connection and more importantly to bein unscramble those priorities. © 43649



UROPE'S IT HIRING IS rebounding, albeit slow-Iv. primarily because of developments in the areas of outsourcing and corporate governance. U.S. IT pros interested in international careers could have a leg up, since they're very familiar with the first and gaining experi-

ence with the second. Helena zu Hobenlobe, an IT specialist at London-based headhunting firm Christopher Beale Associates Ltd., says companies, particularly in financial services, define corporate governance in terms of operational transparency. European executives see IT as the tool to monitor day-to-day operations guarding against the sorts of financial and legal snafus that

U.S. firms are still reeling from Seniorlevel IT managers who can combine tactical technology knowledge with a firm grounding in financial controls, security and disaster recovery are highly prized

Basel II and Sarbanes-Oxley have

created a double-barrel headache for many European companies. Basel II is an international bank accord scheduled for approval in 2004 that severus accounting procedures at global banks and financial services companies. Surbanes-Oxley created a new set of U.S. regulations pertaining to public companies, financial reporting, auditors

and corporate executives The complexities of these directives out pressure on IT departments to build new risk management models. elaborate accounting controls and snappler ways to price loans, assets

and liabilities. ies need to get the work done quickly, so the jobs are there. After all, everyone wants to keep the res-

ulators happy. Companies also want to keep the stockholders happy, so managers are expanding outsourcing to reduce costs.



PIMM FOX IT Over IT specialists experienced in wrestling with shared responsibilities while steering a path for development and costicutting are in demand. To be a CTO or CIO in Europe, you've got to show how you're going to manage IT operations when half the IT staff is in India or really works for IRM or FDS

Because companies are outsourcine great chunks of IT." says Hoberdobe you can't think in terms of 'my people' or 'your people' anymore. You have to think of ways to link IT resources and responsibilities"

An accompanying trend is the develent of specialist centers within IT. That has arisen because it has become difficult to manage technology and vendor relationships without centralizing responsibility. For example, setting up an FRP specialty devoted to an SAP

implementation is common "Companies have rationalized systems," said Hohenlohe. "Now they need people to manage the infrastructure, and that can include an outsourcer, a custom application and links

to outside services." If this all sounds daunting, it is, But don't be dissuaded - many positions still come with four weeks' vacation.

MICHAEL GARTENBERG

# Tis the Season to Predict

THIS IS MY favorite time of year. I'm not talking about the holidays, the good cheer and season's greetings. I mean Prediction Season, when everyone with an opinion publishes a list of what he thinks lies ahead. In the spirit of that

season, here's my 2004 Top 10 forecast. 1. Converged devices will remain a niche. Despite all the hype, converged mobile devices still won't have strong appeal in the market, and no device that attempts to integrate three or more primary functions will win over the marketplace. Users are willing to carry up to three devices. Handheld adoption will be driven by primary intended use, with secondary functions only contributing value to the product, not

ng as the reason for buying it. 2. Wi-fi will overtake wheat. Security is good enough, and IT shops are looking for new ways to increase productivity Secondary benefits are important as well, and corporate Wi-Fi will become the norm and

not the expention 3. Security will still be a hot in-sue for Microsoft. This one is easy. As long as Microsoft mbon the fatom of more

relies upon a core operating system that was architected tool for scientific research. security issues will abound as cybercriminals play car and mouse with Redmond Longborn can't shin any too

soon. Speaking of which 4. Longhorn will become the answer. 17 you ask any question show Windows deficiencies, be prepared to hear "It

will be fixed/added in Loneborn" from Microsoft. 5. Apple will enture to the IT market. The time is right While Microsoft remains in a Longborn holding pattern, Apple Computer will seize the opportunity to gain some modest ground with IT departments that are looking for valid

Ware Reloaded," QuickLink

Computerworld for years and ap-

manage to keep a sense of humor

IT news. Keep up the great world

mos Runico

Think Thin

Acston, Va.

while doing a great job of reporting

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6. Tablet PCs will on main-

many more companies. 7. Instant messaging sca date will replace e-mail coss. IT shops that aren't using secure IM will likely face

some public embarrassment over information discussed in a chat that someone thought was private and later

was publicly disclosed nesses will begin to see the weblor light. For internal communication. blogs are ideal, and they also work well for marketing communications Subprediction: More employees will be fired for comments made on their personal weblogs.

on. The new hardware ic areat, and the new operating system makes the experiance better With lower 10. Moore's Law will continue to be irrule-

price differentials and new form factors tablet computers will so from the 20% of IT departments pi-

Microsoft alternatives.

loting them this year to full-scale deployments at

speeds

8. Corporate weblogs will catch on. Busi-

8. IT will manage commingled inform maces. IT should begin to deploy effective synchronization tools that will essily let users comminate business and personal data. IT should also be perpared to support the synchronization of information on two or more computers. It's not ideal, but users no longer nicely summent themselves for IT

and for meet years. While should increase es are nice, they remain unjustified for most users, for whom "fast" was feet enough around 1999. The focus will be on vendors providing more customer-based software that increases productivity rather than on feeds and

Most important, we will hopefully reap the benefits of technology in a new year filled with peace, prosperity and positive growth. Best wishes for the holidays, and see you in 2004. O 43516

WANT OUR OPINION?

More columnate and links to archives of previous or others, and on our Winks are:

z/OS operating system (Shadow With Senur from Nano Systems) Laughter Reloaded N ICHOLAS PETRELEY'S speed We can give the and user all the graphical functions be likes without giving up the traditional security, re-Rability and scalability, I hope more busted my out bushing. I have mad people realize that there are good. economical alternatives to Microsaft and client/server systems for

large applications. What is wrong with Cohol? Agrees Gunter

Budget systems development specialist. Office of State Budget and Management, Roleigh, N.C.

SINCE I STARTED learning how to develop computer software No Help Needed E ALWAYS LOOK FORWARD to

from IBM 37 years ago. I have seen meny changes. Now I work in state reging Frank Houses in his col remment with core business umn Frankly Speaking, However, in systems where we have large datahis Dirc. 8 article titled "Talk is bases, complicated business lonic Cheap\* [QuickLink 43293], he isn't and severe budget constraints. It is the astute observer he-usually is. encouraging to read about people Decrying the lack of government realizing that thick clients require medding in (I security, he says that more support stell and cause high-er costs ("IBM's Mile Sets Software "we are truly on our own." I can't imagine not wanting to be on my inhts on Middleware 1 max own I don't want the "full action QuickLink 422791. We have had support of the U.S. government. . . very good success the nest two in securing cyberspace." That can years with a Web server that exeonly lead to increased costs and cutes on the maintains under the further coveryment encreachment

where it doesn't belong and to mention yet another toussiver-funded boardoopie at the federal povemment from to extend the one with fits-all security standards. Thanks. but they've been enough help almake Cathy Taddel

Portland, Ore. Cathy.Toddei@comcast.net

A Call to India O on expenience with Microexcellent but this next month when we had an Exchange probiem, our call got muted to a tupport

center in India ("Offshore Support Questioned,\* Quicklusis 433401 The technician made little attempt to understand our grablem. merely corrusted the Microsoft knowledge bese articles (some thing we could just as easily do? and suggested we rebuild the whole machine and reinstall Ex-

chance which would have mention a huge investment in time, the loss of significant data and e-meil being down for an extended period of time. We asked to be placed back in the call gueue (to get a new tarboicsan) and got routed back to the

same aupport center in India - with the same result - four more times Finally, we escalated to Microsoft support managers, and a technican from Dallas called He solved the problem within 15 minutes - all we had to do was ion at from an NT machine to update permiserons (our 2000 machines weren't work inn) Dramatically less meshed (and less costly) than reinstalling Exchange, Microsoft may say they open new support centers thoughtfully, but our expensence ruppersts.

otherwise Jim Miller Chief technology officer Creditex Inc., New York, im@creditez.com

COMPUTERWORLD welcomes comments from its readers. I etters will be edited for brevely and clarity They should be addressed to James Echle, letters editor, Computerworld PO Box 9171, 500 Old Connecticut

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### **TECHNOLOGY**



OAA Digging Into Documents Romen Feldman, president of text mining software company ClearForest Coxp. tells Computerworld how he thinks the technology can transform

business, Page 28

27

Taming the Rattle and Hum

Here's advice for the home worker trying to muffle the roar of the fans and other components of noisy PCs. Page 30 FUTURE WATCH Digital Defense

As network intrusions grow in number and sophistication, researchers are finding ways to make systems more like the buman body — adaptive and resilient, even against unknown attacks. Page 32

# OVERCOMING WEB SERVICES INSECURITIES

OUTLOOK: Web services security standards still aren't complete, but putting an application tied to sensitive data on the Web needn't be a recipe for disaster, if you follow the current

Web services security model.

TITISH COLUMBLES Ministry of Mattorney General has a database with secret witness information. Dialmet/Purplest Services North America LLC runs business applications with sensitive dealer and purtner data in them. Lydan Trust Co. bodds private financial information and the configuration of the configur

World Wide Web. And they confidently secure any access to or transactions on those systems through Web services. But none of them stepped blithely

into Web services development. That's because the state of Web services security standards remains in flux. Only one of the proposed standards, Web Services Security, has been completed, and it hasn't been officially adopted by a standards body. The other initiatives are still in development by various vendors, prompting concern that competing approaches will emerches will emerches standards gap for now. Most suppliers claim that they will adopt the standards that do emerge. But any IT shop that's attracted to the power and flexibility of Web services must do its bomework.

#### No Room for Compromise "We spent several months trying to

we speak several months trying to solve the problem of giving real-time access to our database without compromising the security of the information," says

Robert McDonald, director of application management services at the Victoria-based Ministry of Attorney

General.
Tony Lyons, a senior IT manager at DaimlerChrysler in Farmington Hills,

DaimlerChrysler in Farmington Hills, Mich., echoes the concern for caution, saying he was "absolutely" nervougabout Web services socurity at first. Lyous recalls that throughout his company's 10-mouth project, which concuded in late summer, security was: "paramount because people outside the exproxix were gesting access." Developers had to submit their designs and code to multiple, risorous security reviews



by corporate standards committeeses. These weren't rubber stamp exercises the team as more comfortable building security must more comfortable building security must be fall loads of security where they had loads of security with the security with the security with the security of the

acknowledges,
John Studdard, chief technology officer at VirtualBank, a division of Lydian
Trust in Palm Beach Gardens, Fla, also
dismisses using technology. From the
old days," despite the constort level desclopers have with it. "DCOM, COM
and such are complex to maintain and

and such are complex to maintain and complex to secure." he says, Luckib; the multitier model of Web services has matured fast enough to make it possible to implement secure software for a broad base of online users. "Web services works well, espe-

cally when we work with our outside constituents. Sows McDonald. The ministry assigned hum the task. The ministry assigned hum the task or building an application relating province. Until the application relating if anyone warned to find our, say, agine nertial date or the judge assigned not pure for purisual transition of the purisual reason they had no visit a courthouse. The access problem was compounded by the fact that all information related to provincial cases. resided in a contralized Oracle database that included information about witnesses and other restricted data. And the data changed often, adding to the difficulty of the project.

"The information was sensitive and dynamic, with lors of last-manute changes," McDonald says. That meant be couldn't simply create a subset of the database and expose it to the Web.

#### Security Through Separation McDonald halls the architecture of Web services as secure because he can be parate the client from the database and both from the security model.

In the ministry's Justice Information in the ministry of the Information (Information Processes, and a Java-based Who envisee prosent set the logs information in XMI—encrypted format to a gateway from Layer 7 Technologies (Ld. in Vancouver British Columbia. The SecureSpan petwory authentificates the user and reveals only authorized services to whose year.

a lawyer in a financial corruption trial might have access to different services than a citizen checking on traffice-court dates would. The system encrypts each message sent using 128-bit algorithms and can authenticate it to ensure that no one has hijacked a session. And the services that are reposed to users are written as lives stured proceedures so

no other action can be taken except for

the function of the procedures

McDonald praises the tools Oracle Corp, has put into its Oracle® database. He says the Web services tools greatly cased the creation of Java stored procedures, which enhance the applications's security.

At VirtualBank, where Studdard worstees Web services development for all the divisions of Lydain Trust, credit and froud electricing, show the using external credit theorems, such as Londing Tree Inc., outer the Web cause the data transferred between services is somethic, such as Social Security numbers and account information, the messages follow the Web services is something to the Web services in the Company of the Web services is services in the Web services in the Company of the Web services in the Company of the Web services in the Company of the Web services security model for encrypting

Smiddard also uses Directory Smart from OpenNetwork Technologies Inc. in Clearwater, Fla, which works with his Windows 2000 Active Directory Severce to authenticate external users to access internal Web services and suthorize their levels of access. Two key benefits of the security model in Web services are that it can

scale and that, because the security

process exists outside the applications that use it, the technology supporting the process can change as needed without affecting the application. Studdard argues. Liberwise, while Studdard argues. Liberwise, while the working specification being developed by Microsoft Corp., IBM and other vendors for the Web Services. Trust Lalgeague and other emerging standard. Studdard syst he's confident and the study of the services are all the servitudes.

"We have a layer written to change out our security depending on where the standards evolve," he says. Getting up to speed on the architecture, methodology and tools for writing Web services applications and

ture, memodatology and tools for writing Web services applications and then securing them remains the most common problem today, users say. Success, however, has yearred wider adoption, putting a greater emphasis on security.

Of the 26 projects on McDanald's.

to-do list for the next 12 months, "six or seven have an e-service component to them," he says, "And all here agree that Web services will be the architecture," O 42781

#### A MATTER OF TRUST Delination arrangivendors has held back development of

Web services security standards.

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Web services by respecting the security
information contained in the XML
documents submitted by Web service
consumers. The Transaction/Moder XML
agent communicates with the Netophy
Policy Service and processes the
authoritional moder authoritions risks

#### OS TECUNO DOS COMO

#### PHAOS TECHNOLOGY CORP. New York

 Phase XML includes tools for encryption and signing it complies with the W3C XML Signature and XML Encryption specifications

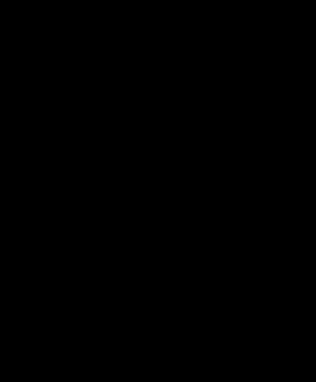
Phaos XXMS provides support for registration, location and salidation of keys and certificates using a trusted

Web service

Phass SAML is complementary to Phass XML for XML-based sequely

Phaos XML for XML-based security assertions for entity attributes, authentication and authorization.

■ Phaos Liberty works with Phaos XVIL and provides secure lederated network identity for single sign-on



by corporate standards committees.

These weren't rubber-stamp exercises. His team was more comfortable building security into client/server software, where they had loads of experience with middleware tools that used Common Object Request Broker Architecture, Component Ob iect Model (COM) and other methods. Now they had to defend their use of XML SOAP and other Web services standards, it was "a challenge," I your acknowledges

John Studdard, chief technology officer at VirtualBank, a division of Lydian Trust in Palm Beach Gardens, Fla., also dismisses using technology "from the old days," despite the comfort level developers have with it. "DCOM, COM and such are complex to maintain and complex to secure " he saw

Luckily, the multitier model of Web services has manured fest enough to make it possible to implement secure software for a broad base of online users. "Web services works well, especially when we work with our outside constituents," says McDonald

The ministry assigned him the task of building an application that gave online access to court proceedings in the province. Until the application rollout, if anyone wanted to find out, say, a given trial date or the judge assigned to a particular case, they had to visit a courthouse. The access problem was compounded by the fact that all information related to provincial cases

resided in a control and Octobe database that included information about witnesses and other restricted data

And the data changed often, adding to the difficulty of the project. "The information was sensitive and dynamic, with lots of last-minute changes," McDonald says. That meant be couldn't simply create a subset of

the database and expose it to the Web. Security Through Separation McDonald hails the architecture of Web services as secure because he can separate the client from the database and both from the security model?

In the ministry's Justice Information Systems project, called IUSTIN Public Inquiry, users sign on via a browner and a lava-based Web services program sends the log-in information in XML-encrypted format to a gateway from Laver 7 Technologies Ltd. in Vancouver, British Columbia. The SecureSpan gateway authenticates the user and reveals only authorized services to whoever loss on For example a lawver in a financial corruption trial might have access to different services than a citizen checking on

traffic-court dates would The system encrypts each message sent using 128-bit algorithms and can authenticate it to ensure that no one has hijacked a session. And the services that are exposed to users are written as lava stored procedures, so no other action can be taken except for

the function of the procedures McDonald praises the tools Oracle Corp. has put into its Oracle9i database. He says the Web services tools greatly eased the creation of Java stored procedures, which enhance the

application's security At VirtualBank, where Studdard oversees Web services development for all the divisions of Lydian Trust. credit and fraud checking is done using external credit bureaus, such as Lendine Tree Inc., over the Web. Recause the data transferred between services is sensitive, such as Social Security numbers and account information, the messages follow the Web carvices security model for encrypting

messages between sites Studdard also uses Directory Smart from OpenNetwork Technologies Inc in Clearwater, Fla., which works with his Windows 2000 Active Directory Service to authenticate external users to access internal Web services and au-

thorize their levels of access. Two key benefits of the security model in Web services are that it can scale and that, because the security process exists outside the applications that use it, the technology supporting the process can change as needed without affecting the application, Studdard argues. Likewise, while OpenNetwork strives to work within the working specification being developed by Microsoft Corp., IBM and other vendors for the Web Services Policy Framework, Web Services Trust Language and other emerging standards. Studdard says he's confident that if his vendors fall out of compli-

ance, be can simply swap out the security services "We have a layer written to change out our security depending on where the standards evolve," be says. Getting up to speed on the architec-

ture, methodology and tools for writing Web services applications and then securing them remains the most common problem today, users say, Success, however, has sourced wider adoption, putting a greater emphasis on security

Of the 26 projects on McDonald's to-do list for the pext 12 months, "vir or seven have an e-service component to them," he says. "And all here scree that Web services will be the architecture." @ 42781

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dent never resentch, text manuse technologies are now having me to find more general acceptance. The mounds of unstructured data that have been poling up in companies for decades are crossing larger as a result of new regulatory requirements that are forcing communies to nature compiland other forgreens - and to be able to find onefficienformation in them. The keep to makens text minute work for business not to mention the intelligence commumery - is striking a halance between accurrent and speed, says Ronen Feidman. chief scientist at text minute software

company ClearForest Corp. in New York. In a recent enterview with Company and Tamery Between Feldman discussed how text minute technologies work and what promise they hold for business

#### What is text moving? How do you squeeze information out of unstructured data? [5,15] cally text mining is the same there as data mining for structured data, but for

documents. So the first there that saw have to do is create some structure. In order to create structure, you actually have several possibilities. The essent way is to work with the bag-of-words model. Basically, each document is just a collection of words. That is purely statistical - vonire doing no semantic analysis. There are still some companies who are doing this. They basically

use the simplest possible approach. The next level is categorization You basically provide tags for the whole document. The last way to structure the documents, which is the most soinfrastrumed is to do information intraction. There you don't provide tresfor entire documents, but you actually extract cuttues and relationships from the document. But that means that the processing is much more suphisticated and obviously takes more time

#### Bo companies have to choose speed vs. sephstication? This is the spectrum -

[bar-of-words] is the cassest and or course the fastest, but it doesn't buy you a lot of mileage, because there is no semantic analysis. With Leategorization), you have a little more, but still it's still not a good enough infrastructure, because you won't have enough tags per document - usually two or three tags per document.



Let's take a document of two pages. If | sometimes, meaning thousands of docyou do information extraction, you can expect 50 to 100 tags, a completely different order of magnitude Clearly you net a much better foundation for text mining Information extraction is the key challenge and it's what really how

#### Tell me more about information extraction. There are two

information in traction The first camp is the knowledge engineering camp, where structurally domest outterms beln you to identify that specific noon phrases should belong to a certain class. The

classes would depend on the domain in which that document is living. If we're talking about the intelligence domain, then the classes of entities you'd be interested in would be people orea nizations, weapons, things like this Relationships would be ... family relationships, people who served together in the army, two people who talked on the phone. In order to develop those entities and relationships in the knowledge engineering approach, you have to define patterns for each entity and for each relationship. You do it usually if you have a very good development environment, and [ClearForest] has had such an environment for six years, which we continue to enhance and idd more features to all the time

The second carno is based on machine-learning algorithms. In machine learning you basically learn by evanple. There are rules, but the rules are written automatically, so it's mainly statistical. The problem is that you need to provide thousands of examples

at the heart of our ClearTest product

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uments. Thousands of documents can take you several months. We saw in a practical product [that ] contomore and just not willing to do it and in many cases just killed this approach completely. They prefer to use our approuch because then they can rely on generic concepts that we have devel-

oped already. It's not as though we start from scratch - we have alreads developed most of the domain-specific entities

Does this end up being knowledge management? Knowl-

eder management is a very broad term; people have used so many different tools to do knowledge management. We are at the infrastructure level, so most of the knowledge manatement tools should use our software

Do you worry about legal issues? When corporate e-mails are mined, will employees feel that their privacy is being towarded? We provide the tools; the usage is up to the customer. They need to worry if they are doing something which is illegal, We create generic technology and sell it to customers. They have to live up to traditional promises not to snoop around their employees too much. The only area I can see it used is in compli-

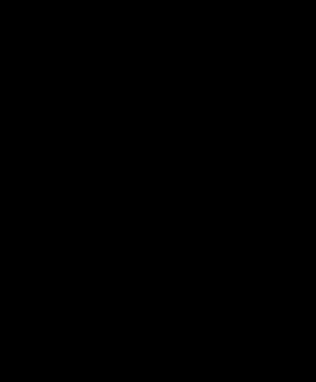
ance, and that should be legal for companies to cheek that their employees are not doing anything they shouldn't. Can you give me a mood idea of what this technology is going to bring to a specific business? Let's take a pharmaceutical

company. The researchers need to read a lot of papers in order to make inferences and get more acquainted with the subject. And usually they spend a lot of time with [the] Medline [Web sitel and [scientific] journals like that, And they spend a lot of time just searching. With an application like ours, they can can take entities they are familiar with - genes, etc. - and specify the queries in a much more focused way. And that means that they focus a lot more on the real develop ment. The hard labor of searching for the information will be saved, which will shorten the time that they take to find new draws

How will this technology change the way companies do research? I think that most of the hard labor will be saved and you will be able to focus on thinking and making inferences and conclusions things machines are actually not so good at. O 43575

### **Digging** Into ocuments

As the need to exploit unstructured data grows, text mining technology is evolving to meet it, says ClearForest's Ronen Feldman.





Formerly used primarily by the intelligence comthat are strongly dependent upon research taxt

mining téchnologies are now beginning to find more general acceptonce. The mounds of unstructured data that have been piling up in companies for decades ore excusing larger as a result of now regulatory requirements that are foreing companies to retain e-mail and other documents - and to be able to find macific information in these The bestmaking text mining work for business not to mention the intelligence community - is striking a balance between accuracy and speed, says Rosen Feldman, chief scientist at text mining software company ClearForest Corn in New Yark. In a recent interview with Computerworld's Tommy Peterson Feldman discussed how text mining

technologies work and what promise they hold for business

What is test mining? How do you see mation out of unstructured data? Basically, text mining is the same thing as data mining for structured data, but for documents. So the first thing that you have to do is create some structure. In order to create structure, you actually have several possibilities. The easiest way is to work with the bae-of-words model. Basically, each document is just a collection of words. That is nurely statistical - you're doing no semantic analysis. There are still some companies who are doing this. They basically

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## lattle and

Noisy equipment can drive the telecommuter to distraction. Here are some tips on reducing decibellevels in your home office By Todd R Weiss

F WAS LIKE WORK INC. BOYL to a lackhammer. Every time the homebuilt PC in my three-computer home office was turned on, it shattered the relative quier with roaring cooling-(an noise.

I had to shut the IX' down when I was talking on the telephone in order to bear the nerson on the other end of the line. The screaming fans could even be heard in the living more one

floor below. Something had to be done. An online search uncovenot a multipate of sound reducing replacement com ponents, from case fans to power supplies to insulating kits. By swapping out parts. I was eventually able to reduce the rooring sound of the PC by more than half. restoring my sanity.

#### By the Numbers

Sound is measured in decibels (48). A 10db reduction cuts the loudness of a sound by more than half according to

acoustics computation. To measure the noise in my home office. I used a Brucl & Klaer North America Inc. Precision Sound Level Meter Type 2208, equipped with an octave filter to take sound readings from 21 inches away. The meter was set to use an A-contour sound filter. which eliminates inaudible low frequencies and provides readings more closely aligned to those experienced

by the human ear The sound level in my office with all the PCs off is 23dh - about the same as the noise level of a great living roum. But when the home-built PC was turned on, it pumped up the volume to 45.5db, roughly comparable to the constant hum of a refrigerator. And it was even louder when the hard drive was spinning during searches for data.

That was where I started. After I installed quiet parts, the sound level with the once-noisy PC idling came down to 31db, which is about the same as a soft human whisper. The change was dramatie - now you can barely hear the PC, even if you put your car

#### right next to it The Ouiet Begins

To get the drastic sound reduction, I installed major parts and made minor modifications, such as adding rubber vibration insulating feet for the mid-

Other thangs had to be uninstalled. First to go was the stock Annee Inc. 300-watt power supply. In its place. I tried out two different units - a 350 watt model from Star Tech com USA LLP and a 300-watt power supply from Nexus Technology BV But neither puplacement unit had much of an effect on the sound of the

PC: it turned out that they were overwhelmed by noisier parts. Next. I swapped out the stock cooling fan for the Athlon XP 1700 processor from Advanced Micro Devices Inc. In its place, I installed an 80mm Panaflo fan with a copper Thermal-Right SLK800A heat sink. The Panaflo

fan did cut the sound, but only by an imperceptable L5dh Then came the biggest surprise: The worst offenders turned out to be the two simple and cheap 80mm case fans. I got a dramatic 8.5db decrease in

naise when I replaced them with Panaflo fans. The total sound drop. now IOdb, literally halved the poise from the PC - and there were more reductions to come I was able to reduce the fan noise

further by installing Zalman Tech Co. Fan Mate I rhoustat controllers, which you can use to manually reduce fan speeds so they make less noise but still provide adequate cooling. Slowing the fans by adjusting the Zalman comtrollers brought the sound down anothers I didle so to the

Next to go yes the Accularated Graphics Port video card, which had a built-in cooling fan I replaced it with a finless AGP card, knocking another 2db off the total. At 32db when is was idline the machine was like a faint

echo of its former self. Now it was time to owiet the Western Digital Corp. 80GB 7,200-rem Caviar hard drive. I removed the drive from its right mount in the DC's bures metal case and inserted it into a No Vibes III rubber-mounted isolator which suspends the drive in thick rubber bands to cushion and quiet it. Although the No Vibes device didn't lowor the sound level at idle to less than 32db, it did reduce the poise the band drive made when it was spinning durine data searches by 4.5db, bringing

the overall level to 37 5db. The final step was installing sound deadening AcoustiPack foam rodding inside the PC's case. The self-stick foam pads helped absorb any noises remaining after parts were replaced They brought the final reading down to a culm 3ldb, for a total 14.5db drop

in second

Benchmark Comparison

Inspired by the success I had reducing the noise level of my home-built PC 1 decided to build a test rig entirely from quiet parts. From the start, the test rig set a baseline score of 33.5dh.

The results showed that by using quiet parts, it's easy to build a low-noise PC - and avoid the anguish of loud equipment on the psyches of office

The second machine features An tec's Sonata quiet case, which includes a rubber-mounted low-noise year funrubber bard-drive mounts and a naiseless power supply. Inside is a finless MSI K7N2-I motherhood fitted with an AMD Athlon XP 2200 processor alone with a quiet Panoflo 80mm cook ing fan and a Zalman CNPS6000 cop-

I also installed a Seagare Technology LLC Barracuda V 120GB hard drive. which is barely audible when it's running. Searches on the Seagate drive are so quiet that they don't affect the 33.5db sound level even when the disk

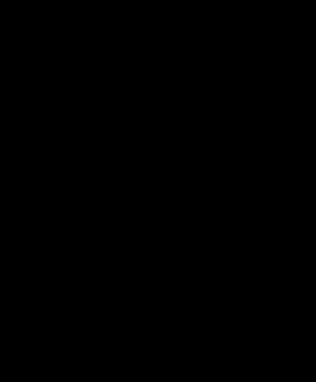
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A few new components are certainly cheaper than oneoing therapy for a home worker driven to distraction by the rattle and hum of his conjument.

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### Taming the Rattle and Hum

Noisy equipment can drive the telecommuter to distraction. Here are some tips on reducing decibel levels in your home office. By Todd R. Weiss

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### **Digital** Defense

#### Coming for information security: tools for adaptive and resilient computing. By Gary Anthes

HE BATTLE AGAINST COMPUSER viruses and system introders is often described as an arms race, in which increasingly powerful weapons are countered by ever stronger defenses. But this particular arms race isn't in a dead heat the movens of malware

are winning it. There are several reasons: Computers are increasing sected by high-speed links. facilitating the spread of malware: software is growing in complexity. and with complexity comes vulnerability: and attack weapons are increasing in sophistication and ease of use (see

But there is hope, say a new breed of computer security researchers. A num ber of them met recently at a workshop called Adaptive and Resilient Computing Security at the Santa Fe Incrimes in New Mexico and unveiled ideas for an arsenal of new defenses The measures are based on widely varying concepts, and they range from ideas to working prototypes to nascent

commercial products. But they share these characteristics: They don't rely on predetermined definitions such as virus signatures, at-

tack scenarios and vulnerability exploits. Thus, they're able to recognize attacks that haven't occurred before. They're intended to allow a system to keep running in the face of an at-

tack, albeit often at a reduced level of They learn and adapt to changing

They limit false alerts, which can

render defense systems unusable. Some researchers are drawing inst ration from biology. "The biological une system is an elaborate defense system which has evolved over millione of years, probably through extensive redesigning testing tuning and optimization," says Dipankar Dascupta, director of the Intelligent Security Sestems Research Lab at The University of Memphis. Dasgupta points out that the

human body protects itself in multiple ways. The skin and mucous membranes act to prevent the entry of pathogens into the body. But if pathogens do succeed in entering the body, innate immune reactions come into play, as do acquired or "adaptive" immunities that learn from post infections. In addi-

tion, the body employs defense mechapisms at various levels - cellular molecular, peptide/protein and DNA lust as no one biological protection suffices to keep us healthy, no single

computer defense is adequate for all attacks, Dasgunta says, "Today these things operate independently. They are by different vendors; they don't talk to each other very well." But Dasgupta's lab has built software

prototypes that address that weakness His Security Assents for Network Traffic Analysis uses mobile software agents for intrusion detection in a network of computers. Agents monitor at multiple levels - packet, process, system and user - using neural networks to snot anomalous behavior and "fuzzy rules" to decide what action the agents should take in the face of an arrack

Variation Helps Stephanie Forrest, a comput er science professor at The University of New Mexico. points out that diversity in biological and ecological systems leads to robustness and resilience. "But our software is almost a monoculture," she savs. She's working on "auto mated diversity for security." in which each system is made

unique by arbitrary random changes. That increases the cost of attack, because the attack has to be adapted for each computer," she says Diversity can be created in a number of ways, such as by adding nonfunctional code, reordering code or ran-

domizing memory locations, file names or system calls Other researchers are experimenting with a measure called Kolmogorov

Complexity, the minimum number of

bits a character string can be comnressed into without losing information. Scott Evans, a researcher at GF Global Research has used it to study attack econories

Evans analyzed file transfer protocol loss and found that attacks, such as a stealth port scan, tend to be more or less complex than normal behavior by predictable amounts, allowing a defense tool to identify and block the attacks. The technique is attractive because it is adaptive and requires no attack signature database, Evans says. Real-world application of some of

> future but Steven Hofmeyr. a former eraduste student under Forrest, has already commercialized some of them He's developed Primary Response, which monitors and protects applications at the operating system kernel level. It uses agents to build a profile of an application's normal behavior based on the code noths of a running program. then continually monitors

these ideas lies were in the

those code paths for deviations from the norm Primary Response works at the application level, where 75% of attacks occur, savs Hofmeyr, chief scientist and a founder of Sana Security Inc. in San Mateo, Calif. Protection at the anplication level will become more vital as it becomes more difficult to define the network perimeter, where firewalls work. Hofmeyr says, "When something like Web services really takes off, it will really deal a death blow to peris ter [security], because it's very difficult to determine what's inside the net-

work and what's outside." When a Primary Response agent spots abnormal behavior, it sends an slert to a central server where it may be directed to block that behavior while letting other activities continue

Hofmeyr says. Hofmeyr says be'd like to extend Primary Response to tuning and debugging. "A lot of what we see in production environments won't be malicious. but it will be indicators that something is wrong, such as configuration prob-lems or hardware problems," be says. "When I look at the bigger picture, I

see this sort of tool as something for system health in general." © 43308 DEFENSE SYSTEMS



Attacks Get Easier.

More Powerful

As the sophetication of internet attacks increases, the technical know

### **Snort Enhancements** Suppress IDS Headaches

Two new canabilities in the freely available Snort intrusion-detection system software prove their mettle in the field by reducing false alarms. By Mathias Thurman

MALSE POSITIVES and data management are two of the most frustrating aspects of using an intrusion-detection system. but a new version of Snort, the freely available IDS that we use, has greatly improved the

situation. We have more than 15 IDS sensors, and a fulltime person is needed just to manage the IDS infrastructure, including the constant deluge of alert data that the sensors gencrate. Although we

configured the sensors to send their alerts to our Security Information Management (SIM) software, a product from Edison, N.I.-based netForensics Inc. that does event correlation and analysis, the sensors are still the first line of defense

Data management starts with the sensors. SIM applies additional correlation methodologies to the events to generate more precise reporting and additional alerting, but the individual network sensors generate the actual alerts. The sensors do this by analyzing the network traffic and matching the pottern of activity to the hundreds of rules we set up in

alerts on suspicious activity The problem is that we must continually tune the sensors to our constantly changing environment. And one of the most difficult aspects of managing the IDS infrastructure is tuning the alerts to reduce false positives. In our network, for example, we have a lot of Web-based activity. Even

our Snort rule base that trigger

within normal network reaffic flows. IDS sensors generate alerts on activity that looks suspicious but is actually benign. When presented with these false positives, we have a choice: either configure the sensors to stop sending alerts about the event, which means

deleting or "commenting out" the underlying rule from the rules data-SECURITY base: or take up disk MANAGER'S space and bandwidth by storing every instance of the event

The latest release of Sport includes thresholding and suppression features, I suspect that these improvements will spur new sensor deployments while making existing installations

easier to manage. Thresholding, a common feature in commercial IDS products, belos manage false positives. We forcibly prevent our IDS sensors from processing many types of events because of the abundance of false

positives these rules produce. For example, we see many alerts whenever a person or program attempts to access the robots txt file on each of our Web servers. This file provides

We must continually

tune the IDS sensors to our constantly changing environment.

tell search engines which areas of our Web sites shouldn't be accessed. Our Web servers contain confidential or sensitive information that we don't want indexed on Vahoo or Google, Many applications and Web browsers attempt to secess robots.txt as part of normal operations. But mam hackers also attempt to access this file prior to an attack as part of a strategy to eather as

#### much information about a target Web site as they can. On or Off?

So we're in a quandary. Turning off the rules that generate this alert cut down on false positives. But it also creates a blind spot because we can no logger detect any malicious activity that those rules were designed to catch. But leaving it on means accepting hundreds of false-positive alerts ner hour each of which must

be stored and analyzed. Thresholding lets the sensors keep track of the number of file access attempts and produces an alert only after a certain number of attempts have been made. The IDS administrator can still watch for this event but isn't inundated with all those false positives. We have dozens of similar alerts that fall into this catego-

ry. Until now, we've had to disable these rules. Now we can re-enable them. Event suppression is a bit

different. It works by stopping suspicious activity from gencrating alerts, without removing the rule from the rule base. This is done by suppressing event alerts when a user or device within a specified block of network addresses triggers the event. For example, we are constantly barraged by SNMP events generated by users and applications residing within

They use SNMP to troubleshoot and monitor network devices and servers, but backcar also can is to bound do nishof-service attacks or to conduct surveillance.

Fortunately the network on erations center is configured on a separate network. So instead of completely eliminating a specific SNMP trigger from the rule base or configuring a thresholding rule, we can create a rule to suppress these SNMP events from trippering if they are initiated by a machine with an IP address belonging to the operations group. If you use this feature, it's important to know that the suppression rules are performed prior to the thresholding tests. Knowing that, we may combine suppression tests with threshold ing rules to more accurately manage false positives.

Having reduced the Snort alert output, we can now focus on dealing more efficiently with incident response. Today the IT security team responds to all events, but we'd like analysts in the network operations group to also be able to respond. Until now we've found it difficult to properly train them. But with a potential decrease in the amount of false positives and more precise event generation, perhaps we can make this approach work. This could cut down on late-night calls to my staffers. who will be able to sleep knowing that our infrastruc-

ture is in good hands. WHAT DO YOU THINK?

obvious mesons. Contact him at method thurman Profession, or you the discuss in our fenure Quickl, link at 500 find a committee arritme of our

#### BRIEFS

#### Actuate Delivers Easy Data Access

List week, susness ensequence software maker Adnate Corp. in South San Francisco announced a new product offering easy access to both reporting and analytic ic operations from a single server. Called Actuate Analytics, it will stilp generably in January and starts at \$15,000 one CPU.

#### FileNet Expands Portlet Support

Enterprise content immagement worder Fieldet Corp. in Costa Mass, Callf. is adding support for surrard new Java portiets to its applications in allow assior integrition with Web portias. The company sold it will apport its surrary and its surrary in apport rever portial computing standards, become as Java Specification Reported the provided of the conpany of the company and the provided of the company states of portions and company states of portions and company states of portions and company states of the company st

### Norfolk Southern

I couche West Works, with oldostigetics and TransWorks, suchnology development units of works Seathers Corp., in Nordevick Seathers Corp., in Nordevick Seathers Corp., in Nordevick Seathers of Webseard application to help corcerose all modes of transportator. The application includes surfar tendering and assection, ichips and delivery scheduling, and order tracking, Automated and-Norther Seathers of the Seathers of the such-Norther processing is also in-

#### PeopleSoft Offers Free Training Tool

PeopleSoft list. last week shipped a free tool that enables companies to plan and track the paylock on separate list for projects. PeopleSoft ROI for Training identifies relevant metrics and monitors them through-

NICHOLAS PETRELEY

### The Nightmare Before Christmas

I FOUND IT DIFFICUIT to decide what to write for my Christmas column this year. My first plan was to provide a list of gift suggestions. For example, Sun could benefit from a subscription to Self magazine, since the company seems to be having a lot of trouble finding itself on its own. Instead, I decided it was impossible to turn to the festivities of the holidays without confronting some ghosts of the year past. So, with apologies to Clement Clarke Moore, I offer this interpretation of his famous poem:

was the week before Christma and at the warkhouse A few workers were griping an occasional grouse. They'd been to a meeting of CEO pap. Where they'd all settled down far a long what's are

While visions of bottom earning their hread, While visions of bottoms danced in their heads. Then out in the hallway there arose such a chatter.

"A present was placed in each cube with great care,

In hopes that we workers would notice them there." So away to my cube I flew like a flash, In search of an envelope filled with hard cash.

The fluorescent lights that were fliktering low. Gave a strobelishe effect to the highest algowar. Then, what in my wandering eyes should appear. The analysis of the strong stro

As after a meal one might savor a pie,

Befine delighting the mouth — fill the nose and the eye

— For minutes I started a that envelope blue,

While thinking nf all of the things I could do.

And then, in a twinkling, I felt like an oaf,

It's fin family, you see, that I libor, not loaf.

As I drew up my hand, and I turned it around, The cavelage glistened where give had it

bound.
It was dressed rather plainfor a thing holding loot.
But tradition aside, decorations were moot

If only it put a few toys in the sack, That would surely make up for the frills that it lacked. With IT positions on scance it was soon

With IT positions so scarce it was scary It took very little to make workers merry!

I thought as my grin was drawn up like a bow.

It was time to stop stalling and get on
with the show.

with the show.

Then I saw as I tore off the side with my teeth,
They had chosen the blue to hide pink

My countenance changed and I quivered like jelly, When I found out my job was nutsourced to Delhi I carefully placed the pink slip na the shelf, As I desperately tried to get hold of myself.

I tried to recall with an ache in my head, What during my nethen did CED oald, I almost gave up and went straight back to work, When I decided instead my not cliff the jerk. And holding my finger right up to his more. I suggested self-low, though in works not quite those. The company stock rose that month like a missile, Then plunged as morale fell with cach new dismissal. By next Christmas I was working again, day and night, At the new CED charged with making thisps right.

I truly hope that this parody inspired a few laughs instead of tears, and wish all of you a most joyous holiday season and a new year filled with blessings beyond anything you can hope or imagine. © 43600



One Version of the Truth

the Holy Grail is to produce "a single version of the truth." But getting there isn't cut and dried - it entails painstaking data modeling, plus political and turf bettles Page 36

OPINION Grooming the CIO's Successor

tions that fail at succession planning will falter when the CIO leaves. He lays out guidelines for developing the next CIO. Page 42



Ne Last to Leave

Data management consultant William McKnight talks about the reasons why BI is a largard when it comes to outsourcing IT projects overseas. Page 40

Prioritizina business projects is hard enough. How do you integrate security and legislative mandates into the mix? **By Kathleen** Melvmuka

Much To Do Constant State Constant S

IO BOS PLANTE WAS under the gun. A big security and controls audit of CIT Group Inc., completed in September, had left a trail of "red marks" - mostly related to Irriclation such se the CISA Petriot Act and the Sashanes Oxiev Act - that had to be addressed immediately While Plante had reconly reorganized his IT group to get a better handle on internal priorities for the Livingston, N.I.-based commercial and consumer finance company, these new legislative mandates were another "He was petting battered by the su-

ditors and the board," says Russ Ward. a senior account manager at Foresthe Solutions Group Inc. in Skokie, Ill., which helped Plante develop a frame work to deal with the issues. "He tended to run from one hole in the dike to the next, responding to whoever was screaming loudest at the time. That's pretty common for most of the folks in his spot right now."

In the best of times, IT has too much to do, but over the past year or so, more and more priorities have been imposed from outside. Already overburdened IT groups must now respond to new legislative mandates, leaving even fewer resources to address pressing internal business needs. "There certainly are a lot of external factors causing more than the normal items on the IT agenda," says John Boushy, who, as CIO at Harrah's Entertainment Inc. in Las Vegas, knows something about regulatory requirements.

"Priority-juggling used to be internal, but now we're getting hit by external factors," says Jean Holley, former CIO at USG Corp. in Chicago, "Probably the CIO at Agilent Technologies Inc. in

Palo Alto, Calif. "I have other asperations, like growing the company satisfying the customer, increasing operational efficiencies. I don't want to be spending on this, It's a necessary evil. chewing up resources we'd eather

spend on something else The challenge is twofold: How do you prioritize these external legislative requirements, and how do you then interrate those new priorities with must-

do business projects? At CIT. Plante and Ward newled to prioritize security and control requirements identified by the security audit They looked at industry security and coerrol standards such as Control Objectives for Information Technology (known as CORIT) and ISO-17700 as well as legislative mandates and identified the portions that were most critical tu CIT, such as those involving change control and system security and recoverability. Then they developed a matrix to map those controls to their most critical systems. Finally, they overlaved the findings of the security and control audits, color-coding each area red. yellow or green, indicating greatest to least risk (see charr below).

At that point, priorities became clear, The next challenge is to complete the necessary compliance activity and still deliver what's in the regular IT project pipeline. Plante manages the competition for resources by detailing the cost of required improvements so that he, the CFO and business unit executives can decide on the proper pacing and level of expense for each

#### Shrinking Demand Detailing the true costs of proposed

projects is a strategy CIO Roger Gray has elevated to an art form at Pacific Gas & Electric Co. in San Francisco. where the key to prioritization is to shrink demand. "What is unmetered is always overconsumed," he explains. By metering things carefully demand is self-correcting. I call it the 'Conservation of IT principle."

IT usually does a good job of laying out one-time costs, he says, but it needs to do the same for ongoing costs, which are often hidden in infrastructure and maintenance budgets. "We don't hide those costs in a black box," Gray says. "If operations wants a system, they know what the bill will be as a project - as well as next year and the year after that."

When the real costs are revealed, demand curtails itself and prioritizing is much more manageable, he says, and budgeting and charactack improve because there are no surprises.

going hog-wild over regulatory requirements. You have to meet the law Gray says, but "the challenge is to be rational

To shrink regulatory demands he says, be sure to define requirements carefully and rationally, and use experts wisely. For example, Gray never uses auditors who also work as consultants to fix the problems they find

Your upper management should ride herd on regulatory issues and set priorities. Chuck adds. "If anything relaed to security, audit or Sarbanes-Oxley is left at too low a level, well-meaning people will overspend on it." he explains. Where they jump into the minutiae of compliance a senior executive with a broader perspective might realize that there are whole areas that don't even need to be addressed "You've got to get senior business lead

ers into the process or it can cat up a lot of time and money" he saws While doing everything he can to shrink internal and external demand. Gray also focuses on productivity "If we can become 1% to 2% more environtive every year, in theory we can absorb 1% or 2% of things that come at us without sacrificing," he explains, "So we try to get better at what we do so

we can absorb these new requirements. Every business has to do that Harrah's IT group is doing a variation on that theme. Boushy has invested for years in "strategic resource augmentation" - using contracted labor

Shrinking demand also means not and not we around and do crazy things."

skills as needed - to yrow his IT capacity dramatically "What helped up get past the paradigm of how to allocate a fixed set of resources was turn ing the problem sideways," he says, "If I can get more resources. I don't have a number-of-projects problem

Because of its casino business. Harrah's operates in 13 different regulatory environments simultaneously, and each has slightly different require ments. Boushy realized years ago that if he had to choose between meeting regulatory mandates and petting business projects done, the business would be poorly served. "If you're forced to trade off, you may have to choose on

the side of the regulatory requiremeet." Boushy explains, "But instead of getting into that choice, by investing in resource augmentation you allow vourself to handle both "

By augmenting staff to tackle the business project, you enhance revenu improving your financial position and making it easier to continue to do more, he says, "As result, you start to loosen the budgetary constraints that surround IT's

Recently, staff augmentation enabled Boushy to finish in six months a comprehensive customer-rewards project that had been estimated to take nine to Il months. He worked with Sanient Corp. in Cambridge Mass, and Inform Technologies Ltd. in Bangalore, India to carve the project into portions for internal, external and offshore people. "Not only did we augment from a runoumbers standpoint," he says, "but when we went to bed, people in India were just getting up, so we were able to do in a 24-hour period almost twice as much work."

Boushy cautions, however, that staff augmentation is a long-term approach We worked with Sapient for five years and Infosys for three years prior to doing the project I described " he says adding that it takes time to develop a good working relationship, "If you don't give it time, you're likely to hit more bumps in the road," he says But what if you lack the budget for extra resources? Boushy says if you can

show the real value of IT investments. the money will be there. He's been able to do that with a very robust financialprojection, monitoring, measuring and tracking capability. That enables him to see exactly what a project costs, then track the business value it creates Every year he reports on how IT investments are doing. "We're constantly evaluating our investment in information technology just as you would evaluate bow your stocks are performing," he says. "And we make decisions going forward based on that, IT is seen as investment from which we expect to receive internal rate of return just as

tization, Holley says, "You've got to have a way to measure projects to see if you made the right decisions," she says. "If you don't keep score on whether you got business value from projects. how will you know how to prioritize projects in the future?" O 43236 Melymuka is a Computerworld con-

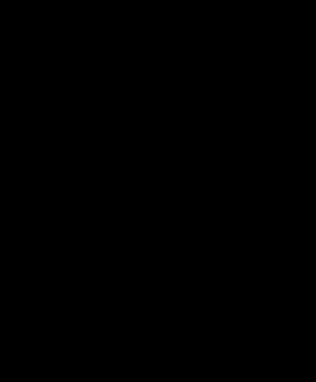
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Tracking is essential to good priori-

tributing writer. She can be reached at kmelymuka@yahoo.com.







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Tracking is essential to good priori

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Melymuka is a Computerworld contributing writer. She can be reached at kmelymuka@yahoo.com.

#### Red Alert With help from the Forsythe Solutions Group, Sinance

gant OT Group was able to establish priorities about which arountly problems should get attention first. It this shipflied version of a chart for two OT applications, the results of a sountly audit were mapped for the SO 17799 sountly strated and the rasks were color-coded and (high), willow (markers) or green (low).

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8.7.2 Security of made in transit	
8.7.2 Electronic commerce security	
8.7.4 Security of electronic cond	
8.7.5 Security of electronic effice systems	
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8.7.7 Ober lasso of information exchange	



# Getting there takes more than sophisticated business intelligence software. It takes data quality and political battles, too. BY. JULIA KING

ALK ABOUT CHAOS.

For decades, corporate executives have made strategic business decisions based on information deduced from multiple reports that IT compiled by summarizing sets of frequently conflicting data.

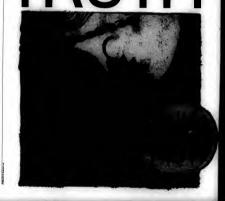
State of the control of the control

marketing campaign? By 2005, market research firm IDC projects the worldwide market for business intelligence software will total about \$6 billion — up from \$2.5 billion this year - signaling a voracious user appetite for the truth. But getting there isn't just about buying and deploying new software tools. Instead, it involves an arduous data-modeling effort appront, and that can trigger widespread political battles and numerous other chailenges. Here's a rundown of not-sopredictable gotchas and how some veteran users of business intelligence systems overcome them

RAMELY, IF EVER, IS THE
TRUTH BI PLAN SHORT.
Truly valuable business information must be mined from disparate and 'dirty' data that resides in multiple, incompetible computer applications and databases.
Fair warning: It takes many months and requires poping militant atten-

tion to detail to combine and prepare the source data that will ultimately





get you to a single version of the treath. Pitzer lies. receded to pull data from 14 systems, each of which hundles a unique alice of the business, to come up with a comprehensive financial picancial pican pican pican pican pican giant. In what terror do ut to be a false start, Pitzer's IT group began by creating ooftware interrole out to be a false start, Pitzer's IT group began by creating of the pican pican pican pican pican which was conceived as a single source of financial information. The problems of financial information. The problems were defined differently within each of

the contributing systems.
You put all the data together and you've won the hattle, but lost the war. Tooks Danny Siegel, serior manager of business technology at New York-based Piler. It took us four months just to integrate a few sources. Lesson learned: Gathering the data in a single place is only half to battle. We saw that we had to put in place some regiorous data standards on the place of the place

standards that allows users to slice and dice data in whatever context they need it." Siegel says.

Tony LoFrumento, executive director of CRM at \$19 billion Morgan Stanley, which created a database that provides a bolistic view of each of the firm's 5 million accounts, advises others.

ers to pay more attention to information content than to its delivery.

"People talk about business intelligence and getting to one version of the truth, and what they usually think about first is the reporting tools," says LOPumento. "The reporting tools agreed, but without the right information and data infrastructure in place, you're just spirting buck what sucre surrectifying the properties of the properties of the more of the properties of the properties of the surrectified the properties of the properties of the properties of the surrectified the properties of the properties of the properties of the surrectified the properties of the properties of the properties of the surrectified the properties of the properties of the properties of the surrectified the properties of the properties of the properties of the surrectified the properties of the properties of the properties of the surrectified the properties of the properties of the properties of the surrectified the properties of the surrectified the properties of the p

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and the right questions is
also an ongoing process. "There really
over is an end to the process," says
Rob Cox, director of financial planning
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Cox's team took months to come up with standard definitions and reports as part of Erickson's implementation of analytical software from Hyperioo Solutions Corp. But it wasn't long after the software was deployed that the balking began. "People came out of the



woodwork to say they needed different definitions." Cox recalls. One department wanted to include depreciation in the net income calculation, while

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central autatoses so that the new types of reports can be produced. Even though the numbers may be broken out different of partnesses, they still roll up to a single bottom-line number for the entire company, Cox says. "It's more work, but it's always better to take the time and change things in the database. The trush is a moving target, and you've got to be willing to stop the pressess and do the work to change the

database, rather than allow every user to make overriding adjustments on their reports." he adds.

At AXA Financial Inc. in New York, a ediciated data management team within IT is responsible for what Marvin Rafe, IT director and chief architect, describes an "data stewardship," Whenever there are discrepancies across various lines of business, this IT team takes the issues to a cross-departmental data niewardship team for resolution of the proposition of the propositi

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The second, adopted successfully at \$2.1 billion automotive retailer Pep Boys, is to appeal directly to end users, such as salespeople and managers in the field "who are starving for data," according to Bob Berckman, director

of database services at the 595-store chain based in Philadelphia.

"Our original approach was to go to section management, and they like the concept of one version of the truth, but her concept of one version of the truth, but her yeardlan't focus on it long enough, and after a year, it just want taking, and the property of the pro

grass-roots approach, hitting up re-

gional managers and individual store

managers for support for the now 6year-old business intelligence system. "If they could get accurate information in a timely manner, it made their jobs easier," so their incentive to make the project work was greater. Berck-

man points out. Before business intelligence systems, Pep Boys managers needed to call the store managers in their regions for financial information. Each store reported differently, plus they reported at different times, making an accurate, comprehensive regional sales regional sales reponal and stores report data the same way the same time. Teveryone is looking at the same time. Teveryone is looking at the same time.

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truth," says Beeckman.

The WHOLE TRUTH IS BEST DE-LIVERED IN CREAMS AND ON-LIVERED IN CREAMS AND ON-THE CREAMS AND ON-A five years go, we started time as possible, "results Sord Hiese. Clo at disk drive manufacturer Measure Cop-"But we learned that you really only wast to publish information as the rest it can be understood and used in decision-making. To have near were decision-making to have ne

updates of financial and operational reports at different times of the day. Of course, the numbers varied, representing multiple versions of the truth, which created chaos, not clarity. The solution was to publish updates at specified times throughout the day.

Finally, IT shouldn't make any assumptions about the kinds of information business users will want next another misstep Maxtor made early on in its business inselligence project. "Once we saw where the business was going and the kinds of questions

"Once we saw where the business was going and the hinds of questions they were asking, we figured they'd several services of the several services when the several business was the business when the several business was the several business when the several sever

REAL-TIME DATA
Is it too much of a good thing? See

#### WHAT USERS WANT

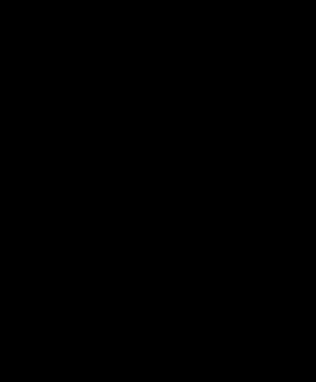
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On the IT side, incheology profession the are responsible for understanding exactly what business users receip from a business intelligence the binds of business questions they made to asserve and the binds of data that will penerate that information. "Some of our challenge in IT has been being able to speak to users in business terrors, which is very lary to business terrors, which is very lary to the second of a business inside, and penerate of the second of a business inside." Some of the second of a business inside pance project," maye Len. "We be IT can talk about dissessions and hardware are seed columns and hardware seed columns and hardware.

con talk about discontains and mamores and columns and halding cubes, but we've also had to learn how to adapt our terminology in the requirements gathering process to talk about what the users do every

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get you to a single version of the truth. Pfizer Inc. needed to rull data from 14 systems, each of which handles a unique slice of the business, to come up with a comprehensive financial nicture of the \$32 billion phyrmacountical giant. In what turned out to be a false start. Pfizer's IT group began by creating software interfaces to link the Lt individual systems to a data warehouse. which was conceived as a single source of financial information. The problem was that business and financial terms were defined differently within each of

the contributing systems. "You put all the data together and you've won the battle, but lost the war," notes Danny Siegel, senior manager of business technology at New York-based Pfizer, "It took us four months just to integrate a few sources " Lesson learned: Gatherie the data in a single place is only half the battle "We saw that we had to rev in place some rigorous data standards. This kicked off a six-month, totally postochnical effort to device a set of standards that allows users to slice and dice data in whatever context they

need it," Siegel says. Tomy LoFramento executive disector of CRM at \$19 billion Morean Stanley, which created a database that provides a holistic view of each of the firm's 5 million accounts, advises orbers to pay more attention to informa-

tion content than to its delivery "People talk about business intelligence and getting to one version of the truth, and what they osually think about first is the reporting tools," says LoFrumento. "The reporting tools are great, but without the right information and data infrastructure in place. you're just spitting back what users al-

ready know, in a nicer format," he says. THE TRUTH IS A MOVING TARGET Defining standard business and financial terms isn't a

once-and-done undertaking Asking the right questions is also an ongoing process. "There really never is an end to the process," says Rob Cox, director of financial planning at Baltimore-based Erickson Retirement Communities LLC, the country's largest developer of retirement housing, with 10,000 residents and 5,000

Cox's team took months to come up with standard definitions and reports as part of Erickson's implementation of analytical software from Hyperion Solutions Corp. But it wasn't lone after the software was deployed that the balking began. "People came out of the

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central database so that the new types of reports can be produced. Even though the numbers may be broken out differently for different departments, they still roll up to a single bottom-line number for the entire company, Cox says. "It's more work, but it's always better to take the time and change things in the database. The truth is a moving target, and you've got to be willing to stop the presses and do the work to change the database, rather than allow every user to make overriding adjustments on their reports " he wide

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GETTING TO ONE VERSION OF THE TRUTH IS A HIGHLY POLITICIZED PROCESS. There are two schools of thought on how to get all parties on the same page. The first is to have a strong executive sponsor who has the clout to enforce data standards and the reporting of agreed-upon key

performance metrics. The second, adopted successfully at \$2.1 billion automotive retailer Pep Boys, is to appeal directly to end users. such as salespeople and managers in the field "who are starving for data." according to Bob Berckman, director of database services at the 995 attorn chain based in Philadelehia

"Our original approach was to go to senior management, and they liked the concept of one version of the truth but they couldn't focus on it long enough, and after a year, it just wasn't taking hold." Berckman recalls, "Also, the senior guys were being hand-fed the information they needed, so there was no need for them to go and get it."

So Berokman switched gears to a grass-roots approach, hitting up regional managers and individual store

managers for support for the now 6year-old business intelligence system.

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Befure business intelligence systems. Pen Boys managers monded to call the store managers in their regions for financial information. Each store reported differently, plus they reported at different times, making an accurate. comprehensive regional sales report nearly impossible to put together. Now. all stores report data the same way at the same time "Everyone is looking as the same numbers. There is no confu-

saon. We have one version of the rngh" enn Benckman THE WHOLF TRUTH IS BEST OF. LIVERED IN CHUNKS AND DIS CLOSED AT PRESCRIBED TIMES. "A few years ago, we started with wanting all data as real-

time as possible," recalls Scott Hicar. CIO at disk drive manufacturer Maxaor Corp. "But we learned that you really only want to publish information at the rate it can be understood and used in decision-making To have a new yersion of the truth every 15 minutes doesn't help anybody" he says. Mileitas. Calif.-based Maxtor had a major snafu with managers reading real-time updates of financial and operational

reports at different times of the day Of course, the numbers varied, representing multiple versions of the truth, which created chaos, not clarity The solution was to publish updates at

specified times throughout the day. Finally, IT shouldn't make new assumptions about the kinds of information business users will want next another misstep Maxtor made early on

in its business intelligence project. "Once we saw where the business was going and the kinds of questions they were askine, we figured they'd want to see more detailed stuff, and we started building data marts based on that." Hicar recalls. "We tried to . . . get them to higher-value information faster, but we learned that IT can't give them the truth," in other words. IT tried to rush the delivery of complex information before the users were ready. They needed time to absorb business intelligence, one step at a

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REAL-TIME DATA

#### WHAT USERS WANT

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need to answer and the kinds of do me of our challenge in IT has on being able to speak to users in ess tornes, which is very key to the success of a business intelliproject," says Leo. "We in IT sures and columns and hubbles cubes, but we've also had to learn

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Companies are outsourcing IT initiatives overseas to save costs, but is it worth it to send business intelligence activities offshore! The costs and benefits of such programs are difficult to pin down even when they're kept in-house. Data management consultant William (McKhajih, president of McKnajih Associates Inc., says the offshoring trend will likely hit II in the next few years. In the

and the supporting treat with a meantaine, he recommends the components to the recommends that components take it slow and strick to an one shorredifficient model, in which the project managers, integrators and architects are homebodies so they can amaintees and homebodies so they can amaintees some courted over the projects, while only routine tasks are done offshore. Jean Constitute and the control over the projects, while only routine tasks are done offshore. Jean Constitute that the control of the control over the projects, while only routine tasks are done offshore. To outcome can assess the control of the co

Why not see Bi ownsess? It's probably not a good first target for offshoring. Data warehousing and BI is very iterative and business-focused — it's not a technical exercise. That's why we got into so many failures early on, because we treated it like a technical

exercise. It's important that most of the [staff] on the project have business knowledge. And it's also a best practice to have a small team of five to seven that acts as a SWAT team and continually executes on deliverables, as opposed. — what I think is a poor practice—

having a 25- to 90-person data warebousing team. Until you have your processes efficient, having that many

souring reams. Omit you have your processes efficient, having that many people is just adding to inefficiency. The offshore model makes sense when you have larger projects. If you consider that may be 2006 or 2006 will be about when offshoring best practices emerge for technology-related projects, you're probably looking at an other year or two before offshore BI

How are companies deciding whether it's financially worthwhile to go offshore? How you deliver is a TCO question, it's not an ROI question. It has everything to do

with the investment. But the business targets don't change, regardless of the delivery mechanism. And so offshoring, if viewed as a lower-cost approach, will increase your ROI because you'll have lower costs. But it won't do much for your returns except put them at a slightly higher risk, because the delivery man not work as exexected unless.

What are some of those best practices? Set up tight specifications, and don't expect too much first off. I would recommend starting with a staff-sugmentation-type approach and growing from there. Set up service levels, and set your expectations appropriately and case into it. Keep an onshore presence

you employ best practices.

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Why hosp that onshort? Bit is very business-focused, the develop nomething quickly, we put it out there and get user feedback. We eliance it, we timprove it, and then we move on to the prove it, and then we move on to the think of the state of the stat

technical specifications. If you're going to have offshore BL, you're going to have offshore BL, you're probably looking at a best practice of doing that only if you have longer-term projects with more stable requirements. And you must have a willingness to specify those requirements to the degree necessary such that a technical person can act upon them without too much knowledge of your hustiness.

What are the risks in offshoring BP7 I think the biggest risk is that ETL festract, transform and load, which is a huge part of data warehousting and Bi, is worthy underestimated. And it's not solidy a stechnical exercise. It has an example the state of the users should come from our will not be as involved as they need to be when you on offshore the state of the state of the when you contained the state that the state of the when you contained the state that the state of the when you contained the state that the state of the when you contained the state of the state of the when you contained the state of the state of the when you contained the state of the state of the when you contained the state of the state of the when you contained the state of the state of the when you contained the state of the state of the when you contained the state of the state of the state of the when you contained the state of the state of the state of the when you contained the state of the state of the state of the when you contained the state of t

All risks are going to be in the semantic gap of what is expected and what is delivered. This is why the benchmarks and the presgreed criteria are so important to establish upfront. Also, know how you're going to exit a contract before you entity.

How long are contracts? A company has to be very careful getting into offshoring of BI because it's very fluid, it's ongoing in nature, and it never ends. So to think that Ia contract is I wine to ivevina Dutie

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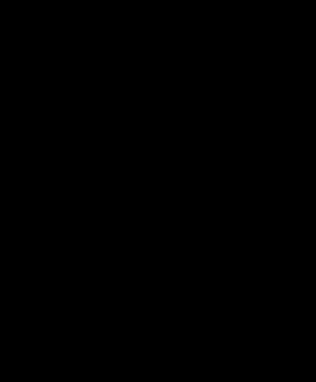
Should companies evaluate tools when going offshore? Tools are a means to an end, and you're negotiating for service delivery. I would want to audit what tools they're using, simply because if things go wrong and I need to take that onshore. I would want to feel comfortable that scalable tools were being used. But we also don't want to try to recusiner what the offshoring company

is good at.

What shills do the in-house folks need to run offshore BP? The main skills are systems integration, project management, and managing to delivery. Somebody who's not a technicion can perhaps do a better job at managing an outsourcing relationship, because they're managing to business deliverables. The same is true for work that's done in-house. Focus on the business deliverables, 60 42807

### **Last to Leave**

Consultant urges a go-slow approach to sending business intelligence functions offshore.





Companies are outsourrine IT initiotives overseas to save costs but is it worth it to send business intelligence activities offshore? The costs and benefits of such programs are difficult to pin down even when they're kent in-house Data management consultant William delicitate, president of McKnight Associates Inc., says the offsharing trend will likely hit BI in the next few years. In the contine. he recommends that componies take it slow and stick to an on shore/offshore model, in which the armiect managers, integrators and architects are homebodies so they can maintain some control over the projects, while only routine tasks are done offshore. Jean Consilvio talked with McKnight about how companies can assess their readiness to outsource such a core

Why not send Bl oversas? It's probably not a good first target for offshoring. Data warehousing and Bl is very iterative and business-focused — it's oor a technical exercise. That's why we got into so many failures early on, because we treated it like a technical

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Why hasp that enthur Z R1 is very businesse-focused. We develop something quickly, we put it out there and get user feedback. We enhance it we improve it, and then we move on to the most targest and do the same things with ent targest and do the same things with what we've put into production. So that life cycle is very quick-turn. That means the development team has to be reactive to the feedback that we get on a day-by-day busis. A lot of the feed-

technical specifications. If you're going to have offshore B1, you're going to have offshore B1, you're probably looking at a best practice of doing that only if you have longer-term projects with more stable requirements. And you must have a willingment so perigit phose requirements to the degree occessary such that a technical person can act upon them without too much knowledge of your hustiness.

What are six risks in effishering BFT think the biggeer risk is the ETI. [extract, transform and losd], which is a buge part of data warebousing and Bl, is vastly underestimated. And it's not solely a technical exercise, it has an equal component: business. So those called for bow the data should look for users should come from users. And make the state of the bow the six should be a fixed by made to be a six body and the six bould be a six body and the six bod

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### BI: Last to Leave

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#### NEWSMAKER



LARRY BUETTHER started as CIO at Mhosts inc., a privately last company in Das Plaines, IL, that havdies corporate leasing and flost reasurgement for about 240,000 ve-

one president of Annunyo LLC, a system integration and pagements company, where he indped implement the Electric in Federal Tax Payment System for the RS in 1905. Restiner, St., spolm with Jean Couplin's about his new job.

What land you to this company? They are very customer and quality-incomed and inchnology is a big part of what the may to due it its gold about 550 employees (probably 100 in IT] and \$1.5 billion is sales—the breacht and odepth of a large company, but with a lot more pressned bouch and a clearer sability to combinitie to its success, which sometimes gots lost in the shuffle at a large company.

What's year IT priority? We have a temonitous amount of data that we have accumulated from our lawers, or if so how we can make that data available and untake at the feet manager level to control costs and improve services. But [if s] also using new technology to sertered services down to the deve, whether that be wireless or whather we white of

Can you give an example? Companies that have salespeople emotely depended need to leep in contact with them. We make sure that the vehicle is providing what's needed and we can communicate to resolve any service in sales as quartely as possible.

What are year challunger? When you have a messive amount of data, how you organize it and use it is the biggest challenge. . . So moving from big database to data merts.

Do you have a detablase in pleas? A very focused and deep system that has been claimed to the fleet business. We're approaching 55 years' existence as a consequent, so it incorporate oil fire business, the party, so it incorporate oil fire business rules see we collected over that time. This work makins us valuable to our customers: Our understanding of the business is well captured in the system. © 4.0013.

NORBERT I. KUBILUS . PEER TO PEERS

### Grooming the CIO's Successor

NFORMATION TECHNOLOGY organizations that fid at succession planning falter when the CIO leaves — which occurs with greater frequency than with any other top executive position. Although it appears to have stabilized in recent years, the average CIO tenure remains between 18 and 36 months. In comparison, the average tenure of a chief financial officer is closer to five years.

myriad IT issues and projects competing for attention, succession planning inst high on the ClO priority list. That's a buman resources function, right? Maybe it is for a ClO in a company that has a formal succession-planning process, but less than onethird of U.S. companies actually do executive successsion planning.

Even when HR takes the lead, the ClO is an integral part of the succession-planning process. In fact, it's the ClO's responsibility to ensure that the company has the IT leader-ship and management taken to sustain growth and profitability if the ClO's should make a sudden devarture.

An IT succession plan is closely related to the IT strategic plan, which sets forth the direction of the IT organization and how it aligns with the company's business goals. Simply put, the succession plan specifies how the human resources in the IT organization will evolve to achieve that stratetion will evolve to achieve that strate-

The first step in succession planning is to predict the technology leadership and business management talent that the IT organization will need three to five years out. Next, come up with a list of qualifications for the future ClO and

key IT managers in terms of experience, knowledge, skills and abilities.

Then, each member of the current leadership the team should be compared against these qualifications. Because of the sensitivity of the subject, the CIO may consider engaging outside assistance. This phase can be accomplished in about four to six weeks, irrolving one to two weeks, irrolving one to two

days per week of effort.

The next step is for the CIO to identify one to three potential successors (either internal or external) and to evaluate each one's level of readiness to move into the CIO role. This effort should be repeated for the next level

down in the IT organization as well. While the CIO owns the succession-planning process, IRE's assistance is invaluable in behight to groom potential successors. Working with IRE, the CIO should proper as individual development plan for each candidate. The plan should detail how that perfence, knowledge, skills and abilities to move up in the IT organization. A periodic progress review is also necessary—at least annually, but every six says and the statement of the progress of the progress

months is better.

There are several ways to develop a succession candidate. One is formal

training to learn more about what it takes to be a CLO and how to prepare for this position. Options include seminars and courses offered by the American Management Association. Leadership Forums sponsored by the Society for Information Management, or one of the CLO "boot campa" sponsored by Campare of the CLO "boot campa" sponsored by Garner and others.

But formal training is only part of the process. Candidate development often includes planned job rotations within the IT department - for example, senior directors rotating through computer operations, application development, telecommunica tions and planning functions - as well as opportunities to gain experience in other departments, such as finance and administration, or in specific business units. Also, mentorine candidates in areas such customer service, vendor management, contract negotiation, business consulting and project management can help round out their skills.

Some CIOs may feel threatened by the concept of CIO succession planning, viewing the succession candidates as a replacement threat rather than part of a backup plan for orderly succession. But developing one or more strong candidates demonstrates that the incumbent CIO is concerned about the continuity of IT leadership and about protecting the company's technology investment. Having a ready successor may also allow a CIO in a larger or growing enterprise to move into another executive role without having to leave the company or leave the IT organization with weak leadership. © 43400

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#### Continued from page 1 Offshore Labor

Similar bills restricting own ernment offshore work are under consideration in New Iersev. Michigan, North Carolina and Indiana, Indiana made headlines recently when a state jobs agency signed a deal that could have brought in Indian coders [QuickLink

428381 Tom Neitzel, the health care agency's IT manager, said that while he's aware of the political implications of the bid award, his agency has to make decisions based on a project's husiness case not on where the work is performed. "There are very emotional issues susociated with offshore con-

tracting," he said. The winning bid of approximately \$3 million by Healthaxis Inc. - the Irving, Texasbased prime contractor that has been working with Indiabased outsourcer Satvam Computer Services Ltd. -- was the only bid to come in under the \$3.6 million budget set by the legislature for building a new insurance benefits administration system. Written proposals were received from PeopleSoft Inc., Oracle Corp.

and Physmark Inc., and Deloitte Touche Tohmatsu. The savines came chiefly from reduced salary costs, said Neitzel. For instance, Health axis listed per-hour rates for programmers at \$34; other bid-

ders' rates started at \$179. The contract, which was set at about \$2.6 million after the state agency decided to take responsibility for purchasing the systems handware, was signed in May 2002 with the expectation that the system would be in place by the end of June 2003. That deadline

has been moved to next hine. But the delay is costing the agency about \$1.4 million in maintenance and support costs for running its health benefits applications on a system hosted by another state agency, said Neitzel. That's money the Washington State Health Care Authority didn't expect to be paying

Healthaxis isn't seeking additional money and has so far been paid just \$930,000. Neitzel said it's to the firm's credit that it's sticking with its

contracted cost. The project's problems were revealed last week by the Seattle-based Washington Alliance of Technology Workers, which obtained state documents about the project and posted a detailed account about it on its Web site [QuickLink a3910]. The documents list neels

lems with testing and design quality as well as usability In interviews, both sides cited issues with the project's requirements that may not have been evident at the outset

"This project was more than what both parties had anticinated.\* said Neitzel "This has been a large, com-

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TOM WEITZEL, IT MANAGER WASH

INGTON STATE HEALTH CARE AUTHORITY plex project," echoed Emry Sisson, executive vice president of technology and operations at Healthaxis, who noted that this is his company's first project for a state government, "We maintain a good relationship with the state, and we are com-

mitted to delivering and meeting their systems needs. We remain convinced that we will be able to deliver the system Although Neitzel doeso't blame offshore workers for the delay, he said there have been problems. While the

in the U.S. and amone overseus workers have technical skills they don't have insurance subject-matter expertise he said

And that has affected testing. Satyam spokesman Abhiiit Roy said the company has sufficient experience and has "time and again demonstrated its business knowledge

"I Independent unique and business-specific provingments on a project of this magnitude is not something that would be different for offshare we anshare technical

personnel," said Roy But Stan Leneak, an analyst at Stamford, Conn.-based Meta Group Inc., said concern about the business knowledge of offshore companies is a common complaint, especially as offshore firms increasingly take on more complex proj ects. Gaining that business knowledge "is a major challenge for them" and may lead to more acquisitions - both

communies - as they seek to add depth to their skills. Asked what he's learned from the project. Neitzel said.

"I would be certain that clear requirements written maximments, are developed and acreed open. Make sure that clear deliverable dates and documented and agreed upon by all Assume nothing That is what I am learning here, and

it is being reinfarced." As for the effects of our sourcing the project. "I could have had the same thing have pening if everybody had been based in Dallas," Neitzel said. A 49005

..... I don't think that Washington state tax dollars should be used to create jobs. overseas, when we've not skilled workers here.

...... STATE REP. TACK HUDGING

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FRANK HAYES . FRANKLY SPEAKING

#### 2004: It's IT's Turn

EADY FOR 2004? It was supposed to be the year IT would come roaring back after the turnaround of '03. Trouble is, things didn't turn quite the way we expected. The recession turned out to be tougher than anyone inside out. And new government regulations turned into the biggest corporate headache since Y24.—and this time, IT is cleaning up a mess it didn't make. But what's most likely to give you grief in the coming year is TT-shop staffing, as you take your turn in an industry-wide game of musical chairs.

No. there'll be no mass exodus of IT employers who int want change. Tight budgets and outsourced jobs that aren't coming back mean most people in your IT shop will have to hang tough. But be prepared for raids on your IT staffers who have specialized skiller—financial, security and grid-computing experience will be bot. Then be persperted to do some raiding of your own to fill empty seats. Bot takent will koop turning over sa the economy improves.

Will U.S. I't shops turn against offshore outsourcing in 2004? Not likely; offshorers will keep getting better and continue to cut better deals. But we have enough experience now to spot which projects do and don't make outsourcing sense. And as companies start focusing on revenue growth instead of just cost-cuttiles, many critical projects will stay induses.

New government regulations and security will become mirror images of each other: They'll both cost you a bundle, and neglecting either could put your company out of business. Maybe you can't show returns on investment on regulatory- and security-mandated projects, but at least watch for chances to make real im-

provenents, not just quick fixes. And rails frequency identification — the notorious RFID — will turn out to be a lor more troublethan early adopters like Wal-Mara and the Defense Department expect. Saaming RFID chips takes time and also requires extra space in warehouse and on loading docks, along with all the necessary IT resources. The payoff in better inventory control may take years to show up.

snow up.

Utility computing advocates will spend the next year promising to turn your capacity headaches into

fading memories. No, it won't be that easy. Our enterprise applications aren't designed for utility-style flexibility: if they were, we wouldn't have capacity headaches.

Will any long-promised technologies turn into hig winners in the year to come? Not volce over IP, which still requires too many network upgrades — along with a tough learning curve in IP telephony— to hit the big time just yet. Remember, users will put up with network outages that delay email for hours at a time, but take away their dial tones for five seconds, and they'll be screening for IT's collective hide.

And not tablet PCs — they're eating the dust of laptops, which are taking over corporate desktops. No surprise there IT likes laptops because they reasier to lock down, and users like then because they make less noise, take up likes spoce and don't suffer from desktop PC dowdiness or the tablet PC's gooffiness factor. A solid shift to laptops as a desktop standard will delay the success of tablets for years, and maybe foreres.

Nor will Linux make real inroads on the desktop next year: Microsoft's Windows bundling deals will do a better job protecting

that famous monopoly than fify Linux user interfaces, limited supplies of business-class Linux applications and wild-eyed legal threats from SCO combined.

But one thing should turn a little brighter in 2004: corporate IT's reputation. With CEOs under fire and corporate governance under a cloud, IT's old spendthrift rep doesn't seem so bad now. And if we can keep costs under control and deliver projects that meet business needs, in 2004 it will finally be IT's turn to shine once assin. 6 3384



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